

Title: Explorations in Numerical Relativity - Lecture 9

Date: Apr 14, 2011 09:00 AM

URL: <http://pirsa.org/11040050>

Abstract:

$$\nabla_\mu (s_0 u^\mu) = 0$$

$$\nabla_\mu (T^{\mu\nu}) = 0$$

$$T_{\mu\nu} = (s + P) u_\mu u_\nu + P g_{\mu\nu}$$

$$\nabla_\mu (s_0 u^\mu) = 0$$

$$s_0 \varepsilon \gg s_0$$

$$\nabla_\mu (T^{\mu\nu}) = 0$$

$$T_{\mu\nu} = (s + P) u_\mu u_\nu + P g_{\mu\nu}$$

$$\nabla_\mu (s_0 u^\mu) = 0$$

$$\nabla_\mu (T^{\mu\nu}) = 0$$

$$T_{\mu\nu} = (s + P) u_\mu u_\nu + P g_{\mu\nu}$$

$$s_0 \varepsilon \gg s_0$$

$$P = (n-1)s$$

$$\nabla_\mu (s_0 u^\mu) = 0$$

$$\nabla_\mu (T^{\mu\nu}) = 0$$

$$T_{\mu\nu} = (s + P) u_\mu u_\nu + P g_{\mu\nu}$$

$$s_0 \varepsilon \gg s_0$$

$$P = (n-1)s$$

$$\partial_+ f + \partial_- f = 0$$

$$\nabla_\mu (s_0 u^\mu) = 0$$

$$\nabla_\mu (T^{\mu\nu}) = 0$$

$$T_{\mu\nu} = (s + P) u_\mu u_\nu + P g_{\mu\nu}$$

$$s_0 \varepsilon \gg s_0$$

$$P = (n-1)s$$

$$\partial_+ \bar{f} + \partial_- \underline{f} = 0$$

$$g = \begin{bmatrix} \tau \\ s \end{bmatrix}$$

$$f = \begin{bmatrix} s \\ s_0 + P \end{bmatrix}$$

$$\nabla_\mu (g_\nu u^\mu) = 0$$

$$\nabla_\mu (T^{\mu\nu}) = 0$$

$$T_{\mu\nu} = (g + P) u_\mu u_\nu + P g_{\mu\nu}$$

$$g_0 \varepsilon \gg g_0$$

$$P = (n-1)g$$

$$\partial_+ \underline{f} + \partial_- \underline{f} = 0$$

$$g = \begin{bmatrix} \tau \\ s \end{bmatrix}$$

$$P = \begin{bmatrix} s \\ v \end{bmatrix}$$

$$f = \begin{bmatrix} \tau \\ s \end{bmatrix} \quad \psi \rightarrow \begin{bmatrix} 0 \\ 0 \end{bmatrix}$$

$$\nabla_\mu (S_0 u^\mu) = 0$$

$$S_0 \varepsilon \gg S_0$$

$$\partial_+ \underline{f} + \partial_- \underline{f} = 0$$

$$\nabla_\mu (T^{\mu\nu}) = 0$$

$$P = (n-1)g$$

$$g = \begin{bmatrix} \tau \\ s \end{bmatrix}$$

$$f = \begin{bmatrix} s \\ s_{\nu+P} \end{bmatrix}$$

$$\psi \rightarrow \begin{bmatrix} 0 \\ 0 \end{bmatrix}$$

$$T_{\mu\nu} = (g + P) u_\mu u_\nu + P g_{\mu\nu}$$

$$P = \begin{bmatrix} s \\ v \end{bmatrix}$$

$$\nabla_\mu (s_0 u^\mu) = 0$$

$$s_0 \varepsilon \gg s_0$$

$$\partial_+ \underline{s} + \partial_- \underline{f} = 0$$

$$\nabla_\mu (T^{\mu\nu}) = 0$$

$$P = (n-1)s$$

$$g = \begin{bmatrix} \tau \\ s \end{bmatrix}$$

$$f = \begin{bmatrix} s \\ s_{\nu+P} \end{bmatrix}$$

$$\psi \rightarrow \begin{bmatrix} 0 \\ 0 \end{bmatrix}$$

$$T_{\mu\nu} = (s+P)u_\mu u_\nu + P g_{\mu\nu}$$

$$P = \begin{bmatrix} s \\ v \end{bmatrix}$$

$$A'_1 = 0$$

$$A'^2_1 = -v^2 + (1-v^2) \frac{\partial p}{\partial \epsilon}$$

$$A'_1 = 0$$

$$A^2_1 = -v^2 + (1-v^2) \frac{\partial P}{\partial \epsilon}$$

$$A'_2 = 1$$

$$A^2_2 = 2v + (1-v^2) \frac{\partial P}{\partial S}$$

$$A^1_1 = 0$$

$$A^2_1 = -v^2 + (1-v^2) \frac{\partial P}{\partial E}$$

$$A^1_2 = 1$$

$$A^2_2 = 2v + (1-v^2) \frac{\partial P}{\partial S}$$

$$A = \begin{pmatrix} A^1_1 & A^1_2 \\ A^2_1 & A^2_2 \end{pmatrix} = \frac{\partial F}{\partial \theta}$$

$$A'_1 = 0$$

$$A^2_1 = -v^2 + (1-v^2) \frac{\partial P}{\partial \epsilon}$$

$$A'_2 = 1$$

$$A^2_2 = 2v + (1-v^2) \frac{\partial P}{\partial S}$$

$$A = \begin{pmatrix} A'_1 & A'_2 \\ A^2_1 & A^2_2 \end{pmatrix} = \frac{\partial \mathcal{F}}{\partial \theta}$$

$$\frac{\partial P}{\partial \tau} = -2\beta + \frac{(4\beta^2 + \gamma - 1)\tau}{\gamma}$$

$$A'_1 = 0$$

$$A^2_1 = -v^2 + (1-v^2) \frac{\partial P}{\partial \epsilon}$$

$$A'_2 = 1$$

$$A^2_2 = 2v + (1 -$$

$$A = \begin{pmatrix} A'_1 & A'_2 \\ A^2_1 & A^2_2 \end{pmatrix} = \frac{\partial \mathcal{F}}{\partial \theta}$$

$$\frac{\partial P}{\partial \epsilon} = -2\beta + \frac{(4\beta^2 + \rho - 1)\epsilon}{[4\rho^2\epsilon^2 + (\rho - 1)(\epsilon^2 - s^2)]^{1/2}}$$

$$\frac{\partial P}{\partial s}$$

$$A'_1 = 0$$

$$A^2_1 = -v^2 + (1-v^2) \frac{\partial P}{\partial \epsilon}$$

$$A'_2 = 1$$

$$A^2_2 = 2v + (1-v^2) \frac{\partial P}{\partial s}$$

$$A = \begin{pmatrix} A'_1 & A'_2 \\ A^2_1 & A^2_2 \end{pmatrix} = \frac{\partial \mathcal{F}}{\partial \theta}$$

$$\frac{\partial P}{\partial \epsilon} = -2\beta + \frac{(4\beta^2 + \rho - 1)\epsilon}{[4\beta^2\epsilon^2 + (\rho - 1)(\epsilon^2 - s^2)]^{1/2}}$$

$$\frac{\partial P}{\partial s} = - \frac{(\rho - 1)s}{[4\beta^2\epsilon^2 + (\rho - 1)(\epsilon^2 - s^2)]^{1/2}}$$

$$A'_1 = 0$$

$$A'^2_1 = -v^2 + (1-v^2) \frac{\partial P}{\partial \epsilon}$$

$$A'_2 = 1$$

$$A'^2_2 = 2v + (1-v^2) \frac{\partial P}{\partial s}$$

$$A = \begin{pmatrix} A'_1 & A'^2_1 \\ A'_2 & A'^2_2 \end{pmatrix} = \frac{\partial \mathcal{F}}{\partial \mathbf{g}}$$

$$\frac{\partial P}{\partial \epsilon} = -2\beta + \frac{(4\beta^2 + \rho - 1)\epsilon}{[4\beta^2 \epsilon^2 + (\rho - 1)(\epsilon^2 - s^2)]^{1/2}}$$

$$\frac{\partial P}{\partial s} = -\frac{(\rho - 1)s}{[4\beta^2 \epsilon^2 + (\rho - 1)(\epsilon^2 - s^2)]^{1/2}}$$

$$\lambda_{\pm} = \frac{1}{2} \left[A'_1 + A'^2_2 \pm \sqrt{(A'_1 - A'^2_2)^2 + 4A'_2 A'^2_1} \right]$$

$$A'_1 = 0$$

$$A'^2_1 = -v^2 + (1-v^2) \frac{\partial P}{\partial \epsilon}$$

$$A'_2 = 1$$

$$A'^2_2 = 2v + (1-v^2) \frac{\partial P}{\partial s}$$

$$A = \begin{pmatrix} A'_1 & A'^2_1 \\ A'_2 & A'^2_2 \end{pmatrix} = \frac{\partial \mathcal{F}}{\partial \mathbf{g}}$$

$$\frac{\partial P}{\partial \epsilon} = -2\beta + \frac{(4\beta^2 + \rho - 1)\epsilon}{[4\beta^2 \epsilon^2 + (\rho - 1)(\epsilon^2 - s^2)]^{1/2}}$$

$$\frac{\partial P}{\partial s} = -\frac{(\rho - 1)s}{[4\beta^2 \epsilon^2 + (\rho - 1)(\epsilon^2 - s^2)]^{1/2}}$$

$$\lambda_{\pm} = \frac{1}{2} \left[A'_1 + A'^2_2 \pm \sqrt{(A'_1 - A'^2_2)^2 + 4A'_2 A'^2_1} \right]$$

$$r_{\pm} = \begin{bmatrix} 1 \\ y_{\pm} \end{bmatrix}$$

$$A'_1 = 0$$

$$A'^2_1 = -v^2 + (1-v^2) \frac{\partial P}{\partial \epsilon}$$

$$A'_2 = 1$$

$$A'^2_2 = 2v + (1-v^2) \frac{\partial P}{\partial s}$$

$$A = \begin{pmatrix} A'_1 & A'^2_1 \\ A'_2 & A'^2_2 \end{pmatrix} = \frac{\partial \mathcal{F}}{\partial \mathbf{g}}$$

$$\frac{\partial P}{\partial \epsilon} = -2\beta + \frac{(4\beta^2 + \rho - 1)\epsilon}{[4\beta^2 \epsilon^2 + (\rho - 1)(\epsilon^2 - s^2)]^{1/2}}$$

$$\frac{\partial P}{\partial s} = -\frac{(\rho - 1)s}{[4\beta^2 \epsilon^2 + (\rho - 1)(\epsilon^2 - s^2)]^{1/2}}$$

$$\lambda_{\pm} = \frac{1}{2} \left[A'_1 + A'^2_2 \pm \sqrt{(A'_1 - A'^2_2)^2 + 4A'_2 A'^2_1} \right]$$

$$r_{\pm} = \begin{bmatrix} 1 \\ y_{\pm} \end{bmatrix}$$

$$y_{\pm} = \frac{\lambda_{\pm} - A'_1}{A'_2}$$

$$A'_1 = 0$$

$$A^2_1 = -v^2 + (1-v^2) \frac{\partial P}{\partial \epsilon}$$

$$A'_2 = 1$$

$$A^2_2 = 2v + (1-v^2) \frac{\partial P}{\partial s}$$

$$A = \begin{pmatrix} A'_1 & A'_2 \\ A^2_1 & A^2_2 \end{pmatrix} = \frac{\partial \mathcal{F}}{\partial \mathbf{g}}$$

$$\frac{\partial P}{\partial \epsilon} = -2\beta + \frac{(4\beta^2 + \rho - 1)\epsilon}{[4\beta^2 \epsilon^2 + (\rho - 1)(\epsilon^2 - s^2)]^{1/2}}$$

$$\frac{\partial P}{\partial s} = -\frac{(\rho - 1)s}{[4\beta^2 \epsilon^2 + (\rho - 1)(\epsilon^2 - s^2)]^{1/2}}$$

$$\lambda_{\pm} = \frac{1}{2} \left[A'_1 + A^2_2 \pm \sqrt{(A'_1 - A^2_2)^2 + 4A'_2 A^2_1} \right]$$

$$r_{\pm} = \begin{bmatrix} 1 \\ y_{\pm} \end{bmatrix}$$

$$y_{\pm} = \frac{\lambda_{\pm} - A'_1}{A'_2}$$

$$\nabla_M (S_0 \psi) = 0$$

$$\nabla_M (T^{mn}) = 0$$

$$T_{mn} = (s+p) u_n u_m + p g_{nm}$$

$$S_0 \Sigma \gg S_0$$

$$P = (n-1)s$$

$$\partial_+ \bar{\psi} + \partial_- \bar{\psi} = 0$$

$$b = \begin{bmatrix} \tau \\ s \end{bmatrix}$$

$$P = \begin{bmatrix} s \\ v \end{bmatrix}$$

$$f = \begin{bmatrix} s \\ s+p \end{bmatrix} \quad \psi = \begin{bmatrix} 0 \\ 0 \end{bmatrix}$$

$$\sum w_n \ln r_n$$

$$\nabla_M (S_0 \psi) = 0$$

$$\nabla_M (T^{mn}) = 0$$

$$T_{mn} = (s+p) u_n u_m + p g_{mn}$$

$$S_0 \Sigma \gg S_0$$

$$P = (n-1)s$$

$$\partial_+ \underline{f} + \partial_- \underline{f} = 0$$

$$b = \begin{bmatrix} \tau \\ s \end{bmatrix}$$

$$P = \begin{bmatrix} s \\ v \end{bmatrix}$$

$$f = \begin{bmatrix} s \\ s+p \end{bmatrix} \quad \psi \rightarrow \begin{bmatrix} 0 \\ 0 \end{bmatrix}$$

$$\sum \omega_a \ln \alpha_a$$

$$\nabla_M (S_0 \psi) = 0$$

$$\nabla_M (T^{uv}) = 0$$

$$T_{uv} = (S+P)u_v u_u + P g_{uv}$$

$$S_0 \Sigma \gg S_0$$

$$P = (n-1)S$$

$$\partial_+ \bar{\psi} + \partial_- \bar{\psi} = 0$$

$$g = \begin{bmatrix} \tau \\ s \end{bmatrix}$$

$$P = \begin{bmatrix} s \\ v \end{bmatrix}$$

$$f = \begin{bmatrix} s \\ S_{v+P} \end{bmatrix} \quad \psi \rightarrow \begin{bmatrix} 0 \\ 0 \end{bmatrix}$$

$$\sum \omega_n \ln r_n$$

$$g^r - g^l = \sum_n \omega_n r_n$$

$$\nabla_M (S_0 \psi) = 0$$

$$\nabla_M (T^{uv}) = 0$$

$$T_{uv} = (S+P)u_v u_u + P g_{uv}$$

$$S_0 \Sigma \gg S_0$$

$$P = (n-1)S$$

$$\partial_+ \bar{\psi} + \partial_- \bar{\psi} = 0$$

$$g = \begin{bmatrix} \tau \\ s \end{bmatrix}$$

$$P = \begin{bmatrix} s \\ v \end{bmatrix}$$

$$f = \begin{bmatrix} s \\ s_v + P \end{bmatrix} \quad \psi = \begin{bmatrix} 0 \\ 0 \end{bmatrix}$$

$$\sum \omega_n \ln r_n$$

$$g^r - g^l = \sum_n \omega_n r_n$$

$$w_+ = \frac{1}{2} [r_+[2](g^r[1] - g^L[1]) + r_+[1](g^L[2] - g^r[2])]$$

$$w_- = \frac{1}{2} [r_+[1](g^r[2] - g^L[2]) + r_+[2](g^L[1] - g^r[1])]$$



$$w_+ = \frac{1}{2} [r_-[2](g^r[1] - g^L[1]) + r[1](g^L[2] - g^R[2])]$$

$$w_- = \frac{1}{2} [r_+[1](g^r[2] - g^L[2]) + r_+[2](g^L[1] - g^R[1])]$$

$$w_+ = \frac{1}{d} [r_-[2](g^r[1] - g^L[1]) + r[1](g^L[2] - g^R[2])]$$

$$w_- = \frac{1}{d} [r_+[1](g^r[2] - g^L[2]) + r_+[2](g^L[1] - g^R[1])]$$

$$d = r_+[1]r_-[2] - r_-[1]r_+[2]$$

$$w_+ = \frac{1}{d} [r_-[2](g^r[1] - g^L[1]) + r[1](g^L[2] - g^R[2])]$$

$$w_- = \frac{1}{d} [r_+[1](g^r[2] - g^L[2]) + r_+[2](g^L[1] - g^R[1])]$$

$$d = r_+[1]r_-[2] - r_-[1]r_+[2]$$

$$\nabla_n (S_0 U^n) = 0$$

$$\nabla_n (T^{nn}) = 0$$

$$T_{nn} = (S+P) u_n u_n + P g_{nn}$$

$$S_0 \Sigma \gg S_0$$

$$P = (n-1)S$$

$$\partial_+ \underline{f} + \partial_- \underline{f} = 0$$

$$g = \begin{bmatrix} \tau \\ s \end{bmatrix}$$

$$F = \begin{bmatrix} s \\ v \end{bmatrix}$$

$$f = \begin{bmatrix} s \\ s_v + P \end{bmatrix}$$

$$\psi \rightarrow \begin{bmatrix} 0 \\ 0 \end{bmatrix}$$

$$\sum \omega_n |n\rangle \langle n|$$

$$g^r - g^l = \sum_n \omega_n c_n$$

$$\nabla_\mu (S_0 u^\mu) = 0$$

$$\nabla_\mu (T^{\mu\nu}) = 0$$

$$T_{\mu\nu} = (s+p)u_\mu u_\nu + pg_{\mu\nu}$$

$$\epsilon = (s+p)W^2 - p$$

$$s = vW^2(\epsilon + p)$$

$$W = \frac{1}{1-v^2}$$

$$S_0 \epsilon \gg S_0$$

$$P = (n-1)s$$

$$\partial_+ \bar{\psi} + \partial_- \psi = 0$$

$$g = \begin{bmatrix} \tau \\ s \end{bmatrix}$$

$$P = \begin{bmatrix} s \\ v \end{bmatrix}$$

$$f = \begin{bmatrix} s \\ s+p \end{bmatrix}$$

$$\psi \rightarrow \begin{bmatrix} 0 \\ 0 \end{bmatrix}$$

$$\sum \omega_n |n\rangle \langle n|$$

$$q^r - q^l = \sum_n \omega_n r_n$$

$$u \cdot$$

$$\nabla_\mu (S_0 u^\mu) = 0$$

$$S_0 \Sigma \gg S_0$$

$$\partial_+ \bar{f} + \partial_- \bar{f} = 0$$

$$\nabla_\mu (T^{\mu\nu}) = 0$$

$$P = (n-1)S$$

$$g = \begin{bmatrix} \tau \\ s \end{bmatrix}$$

$$f = \begin{bmatrix} s \\ s_{\nu+P} \end{bmatrix} \quad \psi = \begin{bmatrix} 0 \\ 0 \end{bmatrix}$$

$$T_{\mu\nu} = (s+p)u_\mu u_\nu + P g_{\mu\nu}$$

$$P = \begin{bmatrix} s \\ v \end{bmatrix}$$

$$\tau = (s+p)W^2 - P$$

$$\sum \omega_n |n\rangle \langle n|$$

$$s = v W^2 (\tau + P)$$

$$g^r - g^l = \sum_a \omega_a r_a$$

$$W = \frac{1}{1-v^2}$$

$$V = \frac{u^-}{u^+}$$

$$\beta = \frac{(2-p)}{4}$$

$$w_+ = \frac{1}{d} [r_-[2](g^r[1] - g^l[1]) + r[1](g^l[2] - g^r[2])]$$

$$w_- = \frac{1}{d} [r_+[1](g^r[2] - g^l[2]) + r_+[2](g^l[1] - g^r[1])]$$

$$d = r_+[1]r_-[2] - r_-[1]r_+[2]$$

$$P = -2\beta\tau + \sqrt{4\beta^2\tau^2 + (1-\beta)(\tau^2 - s^2)}$$

$$\beta = \frac{(2-p)}{4}$$

$$w_+ = \frac{1}{d} [r_-[2](q^r[1] - q^l[1]) + r[1](q^l[2] - q^r[2])]$$

$$w_- = \frac{1}{d} [r_+[1](q^r[2] - q^l[2]) + r_+[2](q^l[1] - q^r[1])]$$

$$d = r_+[1]r_-[2] - r_-[1]r_+[2]$$

$$P = -2\beta\tau + \sqrt{4\beta^2\tau^2 + (1-\beta)(\tau^2 - s^2)}$$

$$f = \frac{P}{(P-1)}$$

$$v = \frac{s}{\tau + P}$$

$$\beta = \frac{(2-p)}{4}$$

$$w_+ = \frac{1}{d} [r_+[2](g^r[1] - g^l[1]) + r[1](g^l[2] - g^r[2])]$$

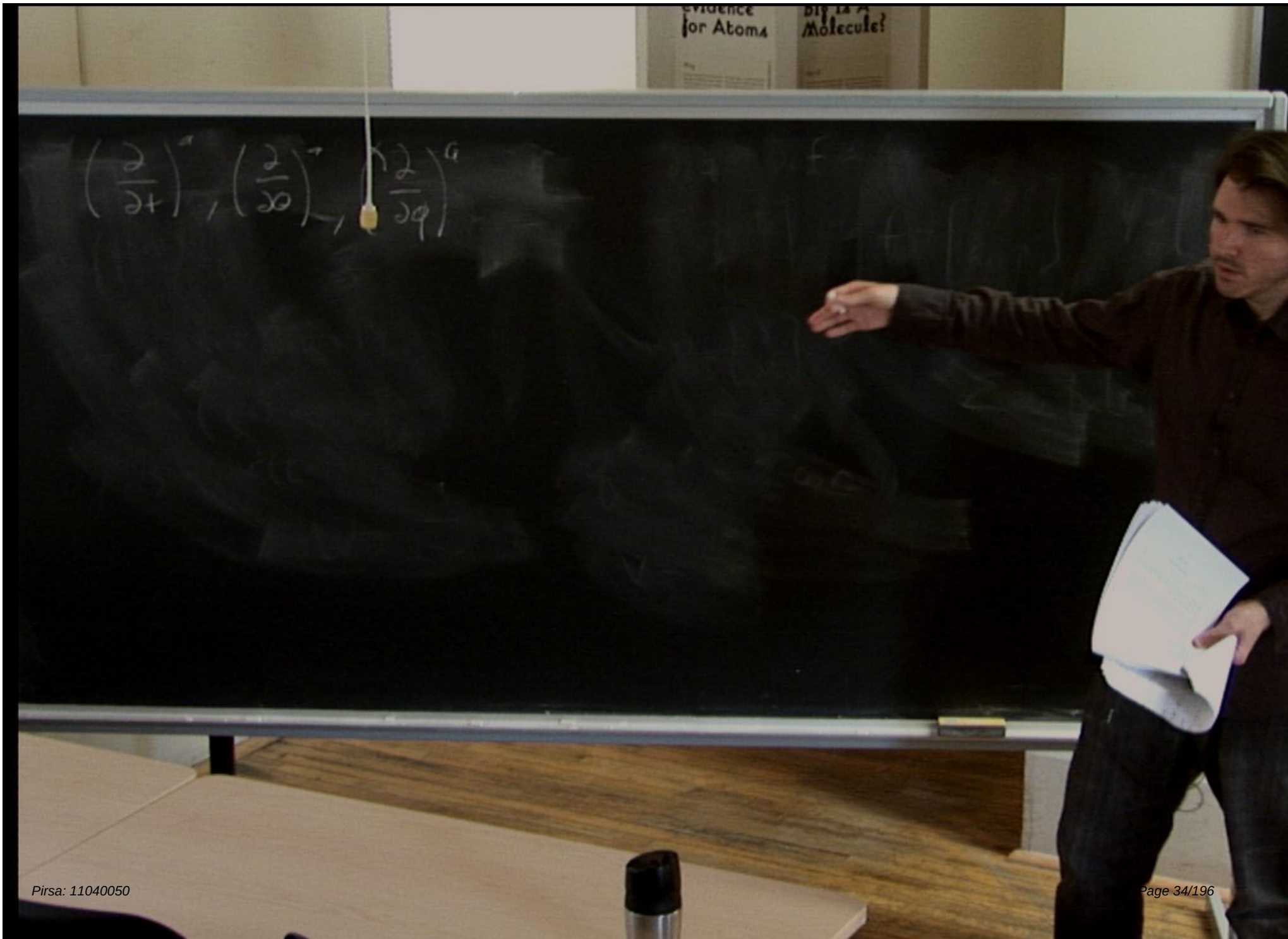
$$w_- = \frac{1}{d} [r_+[1](g^r[2] - g^l[2]) + r_+[2](g^l[1] - g^r[1])]$$

$$d = r_+[1]r_-[2] - r_-[1]r_+[2]$$

$$P = -2\beta\tau + \sqrt{4\beta^2\tau^2 + (1-\beta)(\tau^2 - s^2)}$$

$$f = \frac{P}{(P-1)}$$

$$v = \frac{s}{\tau + P}$$



$$\left(\frac{\partial}{\partial t}\right)^2, \left(\frac{\partial}{\partial r}\right)^2, \left(\frac{\partial}{\partial \phi}\right)^2$$

$$ds^2 = -B(r) dt^2 + A(r) dr^2 + r^2 d\Omega^2$$

$$\left(\frac{\partial}{\partial t}\right)^a, \left(\frac{\partial}{\partial x}\right)^a, \left(\frac{\partial}{\partial \phi}\right)^a$$

$$ds^2 = -B(r) dt^2 + A(r) dr^2 + r^2 d\Omega^2$$

$$T_{ab} = (g + P) u_a u_b + P g_{ab}$$

$$\left(\frac{\partial}{\partial t}\right)^2, \left(\frac{\partial}{\partial r}\right)^2, \left(\frac{\partial}{\partial \phi}\right)^2$$

$$ds^2 = -B(r) dt^2 + A(r) dr^2 + r^2 d\Omega^2$$

$$T_{ab} = (\rho + P) u_a u_b + P g_{ab}$$

$$V^t, V^r, V^\phi = 0$$

$$\left(\frac{\partial}{\partial t}\right)^a, \left(\frac{\partial}{\partial x}\right)^a, \left(\frac{\partial}{\partial \phi}\right)^a$$

$$ds^2 = -B(r) dt^2 + A(r) dr^2 + r^2 d\Omega^2$$

$$T_{ab} = (\rho + p) u_a u_b + p g_{ab}$$

$$V^t, V^r, V^\phi = 0$$

$$\left(\frac{\partial}{\partial t}\right)^2, \left(\frac{\partial}{\partial r}\right)^2, \left(\frac{\partial}{\partial \phi}\right)^2$$

$$ds^2 = -B(r) dt^2 + A(r) dr^2 + r^2 d\Omega^2$$

$$T_{ab} = (\rho + P) u_a u_b + P g_{ab}$$

$$V^t, V^r, V^\phi = 0$$

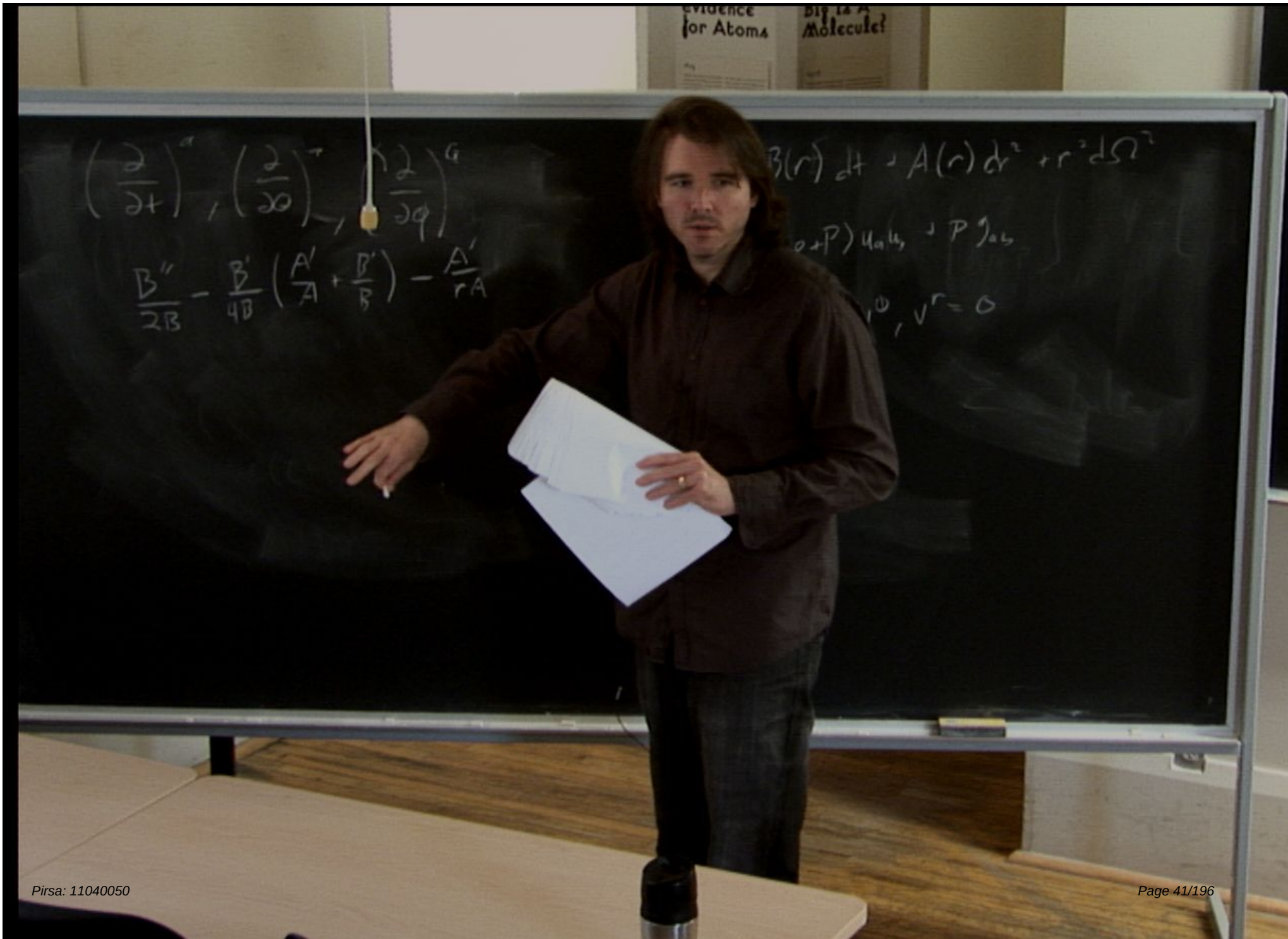
$$\left(\frac{\partial}{\partial t}\right)^2, \left(\frac{\partial}{\partial x}\right)^2, \left(\frac{\partial}{\partial \phi}\right)^2$$

B''

$$ds^2 = -B(r) dt^2 + A(r) dr^2 + r^2 d\Omega^2$$

$$T_{ab} = (g + p) u_a u_b + p g_{ab}$$

$$V^t, V^r, V^\theta = 0$$



$$\left(\frac{\partial}{\partial t}\right)^2, \left(\frac{\partial}{\partial x}\right)^2, \left(\frac{\partial}{\partial \phi}\right)^2$$

$$\frac{B''}{2B} - \frac{B'}{4B} \left(\frac{A'}{A} + \frac{B'}{B} \right) - \frac{A'}{rA}$$

$$B(r) dt + A(r) dr^2 + r^2 d\Omega^2$$

$$(0+P) u_{ab}, + P g_{ab}$$

$$v^0, v^r = 0$$

$$\left(\frac{\partial}{\partial t}\right)^2, \left(\frac{\partial}{\partial r}\right)^2, \left(\frac{\partial}{\partial \theta}\right)^2$$

$$\frac{B''}{2B} - \frac{B'}{4B} \left(\frac{A'}{A} + \frac{B'}{B} \right) - \frac{A'}{rA} = -4\pi \rho A$$

$$-1 + \frac{r}{2A} \left(-\frac{A'}{A} + \frac{B'}{B} \right) + \frac{1}{A} = -4\pi \rho r^2$$

$$-\frac{B''}{2A} + \left(\frac{A'}{A} + \frac{B'}{B} \right) -$$

$$ds^2 = -B(r) dt^2 + A(r) dr^2 + r^2 d\Omega^2$$

$$T_{ab} = (\rho + P) u_a u_b + P g_{ab}$$

$$V^t, V^r, V^\theta = 0$$

$$\left(\frac{\partial}{\partial t}\right)^a, \left(\frac{\partial}{\partial r}\right)^b, \left(\frac{\partial}{\partial \phi}\right)^c$$

$$ds^2 = -B(r) dt^2 + A(r) dr^2 + r^2 d\Omega^2$$

$$\frac{B''}{2B} - \frac{B'}{4B} \left(\frac{A'}{A} + \frac{B'}{B} \right) - \frac{A'}{rA} = -4\pi \rho A$$

$$T_{ab} = (\rho + p) u_a u_b + p g_{ab}$$

$$V^\theta, V^\phi, V^r = 0$$

$$-1 + \frac{r}{2A} \left(-\frac{A'}{A} + \frac{B'}{B} \right) + \frac{1}{A} = -4\pi \rho r^2$$

$$-\frac{B''}{2A} + \frac{B'}{4A} \left(\frac{A'}{A} + \frac{B'}{B} \right) - \frac{B'}{rA} = -4\pi (\rho + 3p) B$$

$$\left(\frac{\partial}{\partial t}\right)^2, \left(\frac{\partial}{\partial r}\right)^2, \left(\frac{\partial}{\partial \phi}\right)^2$$

$$\frac{B''}{2B} - \frac{B'}{4B} \left(\frac{A'}{A} + \frac{B'}{B} \right) - \frac{A'}{rA} = -4\pi \rho A$$

$$-1 + \frac{r}{2A} \left(-\frac{A'}{A} + \frac{B'}{B} \right) + \frac{1}{A} = -4\pi \rho r^2$$

$$-\frac{B''}{2A} + \frac{B'}{4A} \left(\frac{A'}{A} + \frac{B'}{B} \right) - \frac{B'}{rA} = -4\pi (\rho + 3p) B$$

$$ds^2 = -B(r) dt^2 + A(r) dr^2 + r^2 d\Omega^2$$

$$T_{ab} = (\rho + p) u_a u_b + p g_{ab}$$

$$v^\theta, v^\phi, v^r = 0$$

$$\left(\frac{\partial}{\partial t}\right)^2, \left(\frac{\partial}{\partial r}\right)^2, \left(\frac{\partial}{\partial \phi}\right)^2$$

$$\frac{B''}{2B} - \frac{B'}{4B} \left(\frac{A'}{A} + \frac{B'}{B} \right) - \frac{A'}{rA} = -4\pi \rho A$$

$$-1 + \frac{r}{2A} \left(-\frac{A'}{A} + \frac{B'}{B} \right) + \frac{1}{A} = -4\pi \rho r^2$$

$$-\frac{B''}{2A} + \frac{B'}{4A} \left(\frac{A'}{A} + \frac{B'}{B} \right) - \frac{B'}{rA} = -4\pi (\rho + 3p) B$$

$$ds^2 = -B(r) dt^2 + A(r) dr^2 + r^2 d\Omega^2$$

$$T_{ab} = (\rho + p) u_a u_b + p g_{ab}$$

$$v^\theta, v^\phi, v^r = 0$$

$$\left(\frac{\partial}{\partial t}\right)^2, \left(\frac{\partial}{\partial r}\right)^2, \left(\frac{\partial}{\partial \phi}\right)^2$$

$$\frac{B''}{2B} - \frac{B'}{4B} \left(\frac{A'}{A} + \frac{B'}{B} \right) - \frac{A'}{rA} = -4\pi \rho A$$

$$-1 + \frac{r}{2A} \left(-\frac{A'}{A} + \frac{B'}{B} \right) + \frac{1}{A} = -4\pi \rho r^2$$

$$-\frac{B''}{2A} + \frac{B'}{4A} \left(\frac{A'}{A} + \frac{B'}{B} \right) - \frac{B'}{rA} = -4\pi (\rho + 3p) B$$

$$ds^2 = -B(r) dt^2 + A(r) dr^2 + r^2 d\Omega^2$$

$$T_{ab} = (\rho + p) u_a u_b + p g_{ab}$$

$$v^\theta, v^\phi, v^r = 0$$

$$\frac{B'}{B} = -\frac{2p'}{\rho + p}$$

$$\left(\frac{\partial}{\partial t}\right)^2, \left(\frac{\partial}{\partial r}\right)^2, \left(\frac{\partial}{\partial \varphi}\right)^2$$

$$\frac{B''}{2B} - \frac{B'}{4B} \left(\frac{A'}{A} + \frac{B'}{B} \right) - \frac{A'}{rA} = -4\pi \rho A$$

$$-1 + \frac{r}{2A} \left(-\frac{A'}{A} + \frac{B'}{B} \right) + \frac{1}{A} = -4\pi \rho r^2$$

$$-\frac{B''}{2A} + \frac{B'}{4A} \left(\frac{A'}{A} + \frac{B'}{B} \right) - \frac{B'}{rA} = -4\pi(\rho + 3p)B$$

$$\frac{B'}{B} = -\frac{2p'}{\rho + p}$$

$$ds^2 = -B(r) dt^2 + A(r) dr^2 + r^2 d\Omega^2$$

$$T_{ab} = (\rho + p) u_a u_b + p g_{ab} \quad u^a = [-\sqrt{B}, 0, 0, 0]$$

$$v^\theta, v^\phi, v^r = 0$$

$$u^t = -\sqrt{B}$$

$$\left(\frac{\partial}{\partial t}\right)^2, \left(\frac{\partial}{\partial r}\right)^2, \left(\frac{\partial}{\partial \theta}\right)^2$$

$$\frac{B''}{2B} - \frac{B'}{4B} \left(\frac{A'}{A} + \frac{B'}{B} \right) - \frac{A'}{rA} = -4\pi \rho A$$

$$-1 + \frac{r}{2A} \left(-\frac{A'}{A} + \frac{B'}{B} \right) + \frac{1}{A} = -4\pi \rho r^2$$

$$-\frac{B''}{2A} + \frac{B'}{4A} \left(\frac{A'}{A} + \frac{B'}{B} \right) - \frac{B'}{rA} = -4\pi (\rho + 3p) B$$

$$\frac{B'}{B} = -\frac{2p'}{\rho + p}$$

$$ds^2 = -B(r) dt^2 + A(r) dr^2 + r^2 d\Omega^2$$

$$T_{ab} = (\rho + p) u_a u_b + p g_{ab} \quad u^a = [-\sqrt{B}, 0, 0, 0]$$

$$v^\theta, v^\phi, v^r = 0$$

$$u^t = -\sqrt{B}$$

$$m(r) = \frac{r}{2} \left(1 - \frac{1}{r} \right)$$

$$m(r) = \frac{r}{2} \left(1 - \frac{1}{A} \right)$$

$$m(r) = \frac{r}{2} \left(1 - \frac{1}{A} \right)$$

$$\frac{dm}{dr} = 4\pi r^2 \rho$$

$$\frac{dP}{dr} = - \frac{(\rho + P)(m + 4\pi r^3 P)}{r(r - 2m)}$$

$$m(r) = \frac{r}{2} \left(1 - \frac{1}{A} \right)$$

$$\frac{dm}{dr} = 4\pi r^2 \rho$$

$$\frac{dp}{dr} = - \frac{(\rho + p)(m + 4\pi r^3 p)}{r(r - 2m)}$$

$$m(r) = \frac{r}{2} \left(1 - \frac{1}{A} \right)$$

$$\frac{dm}{dr} = 4\pi r^2 \rho$$

$$\frac{dp}{dr} = - \frac{(\rho + p)(m + 4\pi r^3 p)}{r(r - 2m)}$$

$$m(r) = \frac{r}{2} \left(1 - \frac{1}{A} \right)$$

$$\frac{dm}{dr} = 4\pi r^2 \rho$$

$$\frac{dp}{dr} = - \frac{(\rho + p)(m + 4\pi r^3 p)}{r(r - 2m)}$$

Tolman - Oppenheimer - Volkoff
(TOV)

$$m(r) = \frac{r}{2} \left(1 - \frac{1}{A} \right)$$

$$\frac{dm}{dr} = 4\pi r^2 \rho$$

$$\frac{dp}{dr} = - \frac{(\rho + p)(m + 4\pi r^3 p)}{r(r - 2m)}$$

Tolman - Oppenheimer - Volkoff
(TOV)

$$m(r) = \frac{r}{2} \left(1 - \frac{1}{A} \right)$$

$$\frac{dm}{dr} = 4\pi r^2 \rho$$

$$\frac{dp}{dr} = - \frac{(\rho + p)(m + 4\pi r^3 p)}{r(r - 2m)}$$

Tolman - Oppenheimer - Volkoff
(TOV)

$$m(r) = \frac{r}{2} \left(1 - \frac{1}{A} \right)$$

$$\frac{dm}{dr} = 4\pi r^2 \rho$$

$$\frac{dp}{dr} = - \frac{(\rho + p)(m + 4\pi r^3 p)}{r(r - 2m)}$$

Tolman - Oppenheimer - Volkoff
(TOV)

$$P = (n-1)g_0 \Sigma$$

$$P = (n-1)g_0 \Sigma$$

$$g \leq g_0 + g_0 \Sigma$$

$$P = (n-1) \rho_0 \varepsilon$$

$$\rho = \rho_0 + \rho_0 \varepsilon$$

$$P = K \rho_0^P$$

1)

$$P = (n-1)g_0 \varepsilon$$

$$g = g_0 + g_0 \varepsilon$$

$$P = K g_0^n$$

$$g = g_0 + g_0 \varepsilon = g_0 + \frac{P}{(n-1)} = g_0 + \frac{K g_0^n}{(n-1)}$$

1)

$$P = (n-1)g_0 \varepsilon$$

$$g = g_0 + g_0 \varepsilon$$

$$P = K g_0^n$$

$$g = g_0 + g_0 \varepsilon = g_0 + \frac{P}{(n-1)} = g_0 + \frac{K g_0^n}{(n-1)}$$

1) Choose $g_0(r=0) = g_c$

2)

$$P = (n-1)g_0 \varepsilon$$

$$g = g_0 + g_0 \varepsilon$$

$$P = K g_0^n$$

$$g = g_0 + g_0 \varepsilon = g_0 + \frac{P}{(n-1)} = g_0 + \frac{K g_0^n}{(n-1)}$$

1) Choose $g_0(r=0) = g_c$

2) $m(r=0) = 0$

3)

$$P = (n-1)g_0 \varepsilon$$

$$g \leq g_0 + g_0 \varepsilon$$

$$P = K g_0^n$$

$$g = g_0 + g_0 \varepsilon = g_0 + \frac{P}{(n-1)} = g_0 + \frac{K g_0^n}{(n-1)}$$

1) Choose $g_0(r=0) = g_c$

2) $m(r=0) = 0$

3) Integrate from $r=0$ until $g'_0 < 0$

$$P = (n-1)g_0 \varepsilon$$

$$g \leq g_0 + g_0 \varepsilon$$

$$P = K g_0^n$$

$$g = g_0 + g_0 \varepsilon = g_0 + \frac{P}{(n-1)} = g_0 + \frac{K g_0^n}{(n-1)}$$

1) Choose $g_0(r=0) = g_c$

2) $m(r=0) = 0$

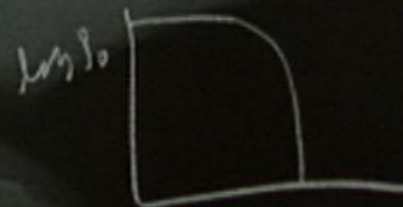
3) Integrate from $r=0$ until $P, g_0 < 0$

$$P = (n-1)g_0 \epsilon$$

$$g \leq g_0 + g_0 \epsilon$$

$$P = K g_0^n$$

$$g = g_0 + g_0 \epsilon = g_0 + \frac{P}{(n-1)} = g_0 + \frac{K g_0^n}{(n-1)}$$



1) Choose $g_0(r=0) = g_c$

2) $m(r=0) = 0$

3) Integrate from $r=0$ until $P, g_0' < 0$

$$P = (n-1)g_0 \varepsilon$$

$$g = g_0 + g_0 \varepsilon$$

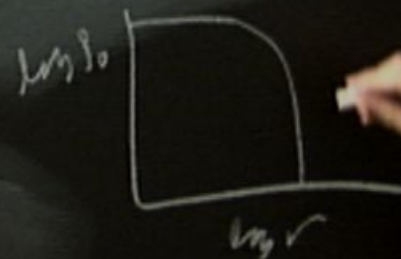
$$P = K g_0^n$$

$$g = g_0 + g_0 \varepsilon = g_0 + \frac{P}{(n-1)} = g_0 + \frac{K g_0^n}{(n-1)}$$

1) Choose $g_0(r=0) = g_c$

2) $m(r=0) = 0$

3) Integrate from $r=0$ until $P, g_0' < 0$

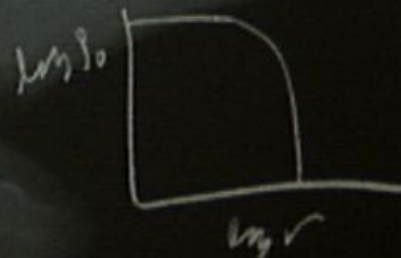


$$P = (n-1)g_0 \varepsilon$$

$$g \leq g_0 + g_0 \varepsilon$$

$$P = K g_0^n$$

$$g = g_0 + g_0 \varepsilon = g_0 + \frac{P}{(n-1)} = g_0 + \frac{K g_0^n}{(n-1)}$$



1) Choose $g_0(r=0) = g_c$

2) $m(r=0) = 0$

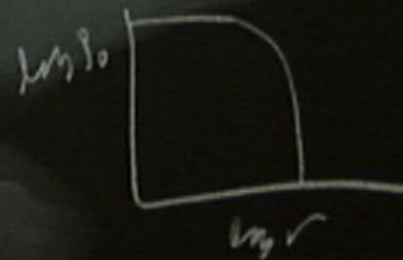
3) Integrate from $r=0$ until $P, g_0' < 0$

$$P = (n-1) \rho_0 \epsilon$$

$$\rho = \rho_0 + \rho_0 \epsilon$$

$$P = K \rho_0^n$$

$$\rho = \rho_0 + \rho_0 \epsilon = \rho_0 + \frac{P}{(n-1)} = \rho_0 + \frac{K \rho_0^n}{(n-1)}$$



1) Choose $\rho_0(r=0) = \rho_c$

2) $m(r=0) = 0$

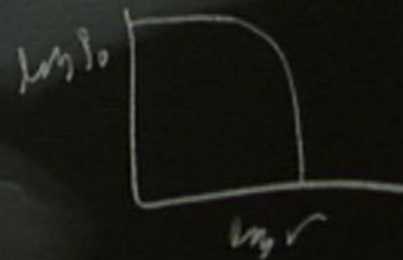
3) Integrate from $r=0$ until $P, \rho_0 < 0$
 R_* , $M_* = m(R_*)$

$$P = (n-1)g_0 \epsilon$$

$$g = g_0 + g_0 \epsilon$$

$$P = K g_0^n$$

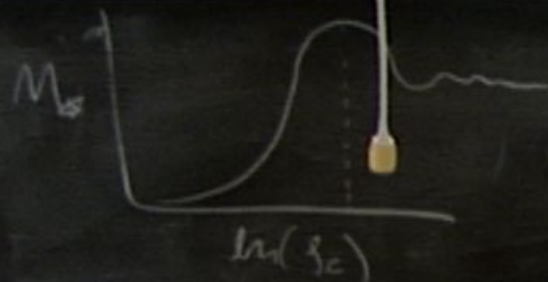
$$g = g_0 + g_0 \epsilon = g_0 + \frac{P}{(n-1)} = g_0 + \frac{K g_0^n}{(n-1)}$$



1) Choose $g_0(r=0) = g_c$

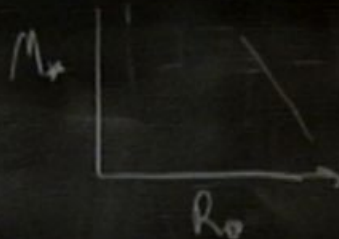
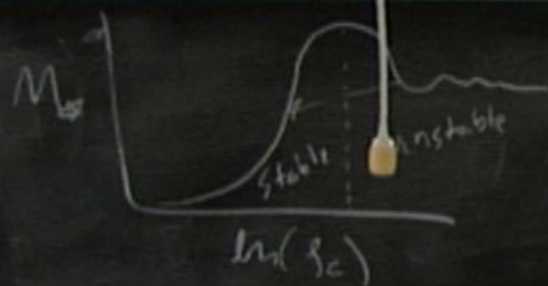
2) $m(r=0) = 0$

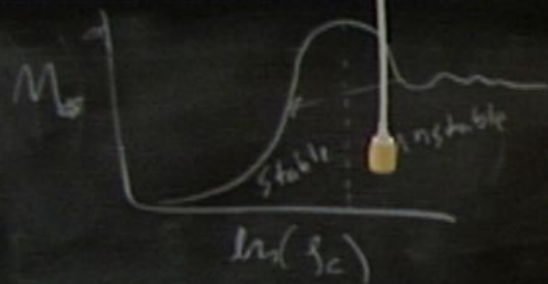
3) Integrate from $r=0$ until $P, g_0 < 0$
 R_* , $M_* = m(R_*)$



Evidence
for Atoms

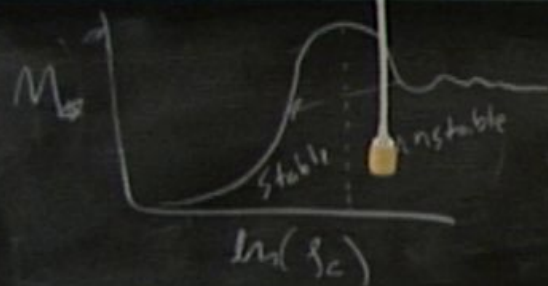
Discrete
Molecule?

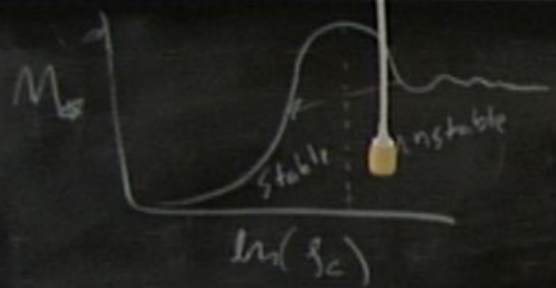


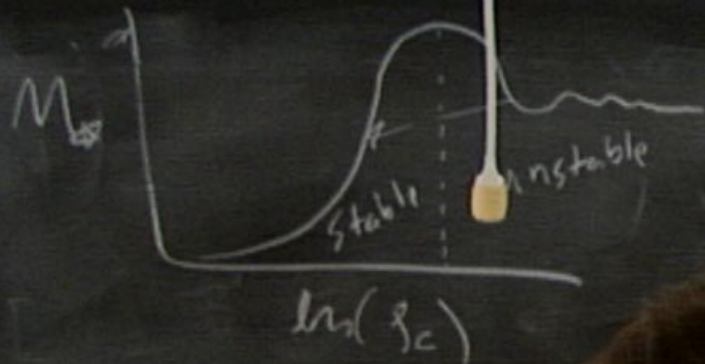


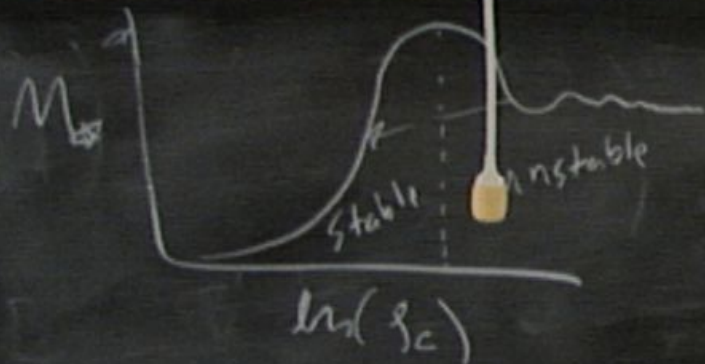
M_s

$H \rightarrow A(r) d^2$

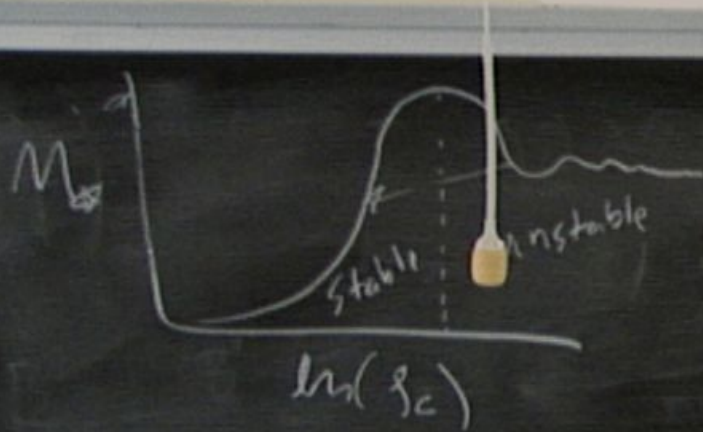






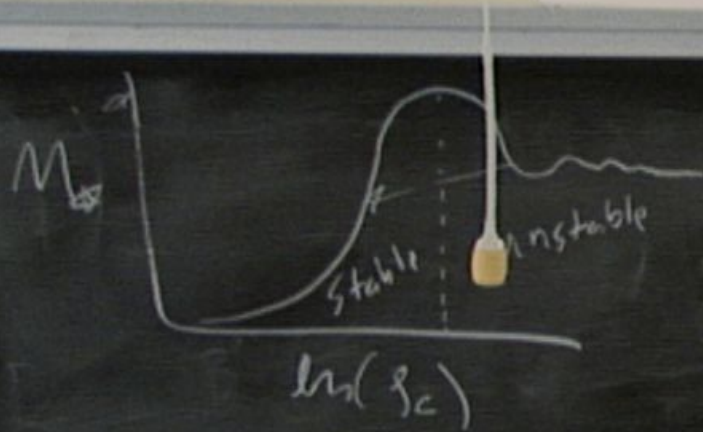


$$\Delta T(p)$$



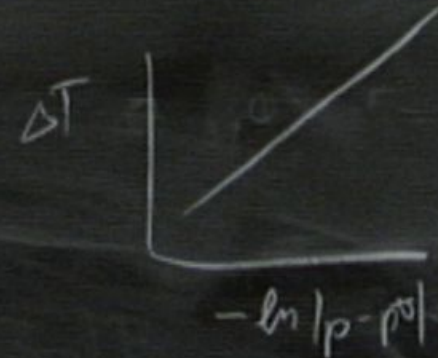
$$\Delta T(p) \propto -\sigma \ln(p - p^*)$$

time on
unstable
branch



$$\Delta T(p) \propto -\sigma \ln|p - p^*|$$

time on
unstable
branch





Terminal — tcsh — 198x37

tcsh

```
mvoies
ach f ( ` cat mvoies ` )
```

```
mpg          dmdr.mpg@          movie.mpg@          mvoies~          q_0q_2c_0.mpg
oe.mpg       dmdr_0.15.mpg@    mvoies            q_0.mpg          q_0q_c_0.mpg
```

```
rCrit.mpg@ -> /Users/scnsma/work/tex/presentations/defense/NearCrit.mpg
```

```
em1001XRoe.mpg
```

```
mfanX.mpg
```

```
mfanXRoe.mpg
```

```
mshockX.mpg
```

```
mshockXRoe.mpg
```

```
r.mpg@ -> /Users/scnsma/work/tex/presentations/defense/fig_0.27/dmdr.mpg
```

```
r_0.15.mpg@ -> /Users/scnsma/work/tex/presentations/defense/fig_0.15/dmdr_0.15.mpg
```

```
ie.mpg@ -> /Users/scnsma/work/tex/presentations/defense/movie.mpg
```

```
ies
```

```
ies~
```

```
.mpg
```

```
q_2c_0.mpg
```

```
q_c_0.mpg
```

```
q_nc_0.mpg
```

```
dmdr.mpg
```

```
~/work/tex/presentations/defense/
```

```
g_typeI/      makeallwww~*{      pix/      pres.out      pres_www.dvi      pres_www.tex-
g_typeII/     makeall~*      preamble.tex      pres.pdf      pres_www.log      pspace.eps
g_vprofile/   matt/      preamble.tex~      pres.ps      pres_www.out      ref/
g/            movie.mpg      pres.aux      pres.tex      pres_www.pdf      scvpres.tex
keall*        oldfigs/      pres.dvi      pres.tex~      pres_www.ps      v.mpg
keallwww*     onega.mpg      pres.log      pres_www.aux      pres_www.tex
```

```
erimeter-psi-april-2011/movies: ls
```

```
RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@          movie.mpg@          mvoies~
RiemfanXRoe.mpg   RiemshockXRoe.mpg   dmdr_0.15.mpg@     mvoies              q_0.mpg
```

```
erimeter-psi-april-2011/movies: dir
```

```
1901925513      578 Apr 14 08:54 ./
1901925513      374 Apr 13 16:26 ../
1901925513       57 Apr 14 08:54 NearCrit.mpg@ -> /Users/scnsma/work/tex/presentations/defense/NearCrit.mpg
1901925513 1284141 Mar 26 15:51 PRiem1001XRoe.mpg
1901925513 3706908 Mar 26 15:51 RiemfanX.mpg
1901925513 3044362 Mar 26 15:51 RiemfanXRoe.mpg
1901925513 1415310 Mar 26 15:51 RiemshockX.mpg
1901925513 2040763 Mar 26 15:51 RiemshockXRoe.mpg
1901925513      62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/presentations/defense/fig_0.27/dmdr.mpg
1901925513      67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/presentations/defense/fig_0.15/dmdr.mpg
1901925513      54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/presentations/defense/movie.mpg
1901925513     196 Apr 14 08:54 mvoies
1901925513     228 Apr 14 08:53 mvoies~
1901925513 2849138 Mar 26 15:51 q_0.mpg
1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
```

```
erimeter-psi-april-2011/movies: open dmdr.mpg
```

```
erimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
```

```
0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pix/      pres.out
0.197/     fig_sbc/      fig_typeII/     makeall~*         preamble.tex      pres.pdf
0.27/      fig_sbd/      fig_vprofile/   matt/             preamble.tex~     pres.ps
o/         fig_sbo/      img/            movie.mpg         pres.aux          pres.tex
pc/        fig_staticstar/ makeall*        oldfigs/          pres.dvi          pres.tex~
primvarsolver/ fig_tov/      makeallwww*     omega.mpg         pres.log          pres_www.aux
```

```
erimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres.pdf
```

```
erimeter-psi-april-2011/movies: open pres.pdf
```



```

RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      movie.mpg@      mvoies~
RiemfanXRoe.mpg   RiemshockXRoe.mpg   dmdr_0.15.mpg@ mvoies          q_0.mpg
erimeter-psi-april-2011/movies: dir

1901925513      578 Apr 14 08:54 ./
1901925513      374 Apr 13 16:26 ../
1901925513       57 Apr 14 08:54 NearCrit.mpg@ -> /Users/scnsma/work/tex/presentations/defense/NearCrit.mpg
1901925513 1284141 Mar 26 15:51 PRiem1001XRoe.mpg
1901925513 3706908 Mar 26 15:51 RiemfanX.mpg
1901925513 3044362 Mar 26 15:51 RiemfanXRoe.mpg
1901925513 1415310 Mar 26 15:51 RiemshockX.mpg
1901925513 2040763 Mar 26 15:51 RiemshockXRoe.mpg
1901925513      62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/presentations/defense/fig_0.27/dmdr.mpg
1901925513      67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/presentations/defense/fig_0.15/dmdr.mpg
1901925513      54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/presentations/defense/movie.mpg
1901925513     196 Apr 14 08:54 mvoies
1901925513     228 Apr 14 08:53 mvoies~
1901925513 2849138 Mar 26 15:51 q_0.mpg
1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
erimeter-psi-april-2011/movies: open dmdr.mpg
erimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pix/      pres.out
0.197/     fig_sbc/        fig_typeII/     makeall~*         preamble.tex      pres.pdf
0.27/     fig_sbd/        fig_vprofile/   matt/             preamble.tex~     pres.ps
o/        fig_sbo/        img/           movie.mpg         pres.aux          pres.tex
pc/       fig_staticstar/ makeall*        oldfigs/          pres.dvi          pres.tex~
primvarsolver/ fig_tov/      makeallwww*     omega.mpg         pres.log          pres_www.aux
erimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres.pdf
erimeter-psi-april-2011/movies: open pres.pdf
erimeter-psi-april-2011/movies:
erimeter-psi-april-2011/movies:
erimeter-psi-april-2011/movies: ls

```

```

NearCrit.mpg@      RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      movie.mpg@
PRiem1001XRoe.mpg  RiemfanXRoe.mpg      RiemshockXRoe.mpg  dmdr_0.15.mpg@  ies
nathscnmacbook : info/perimeter-psi-april-2011/movies: dir
total 46736
lrwxr-xr-x  17 scnsma  1901925513      578 Apr 14 08:54 ./
lrwxr-xr-x  11 scnsma  1901925513      374 Apr 13 16:26 ../
lrwxr-xr-x   1 scnsma  1901925513        57 Apr 14 08:54 NearCrit.mpg@ -> /Users/scnsma/work/tex/presentations/
-rw-r--r--   1 scnsma  1901925513 1284141 Mar 26 15:51 PRiem1001XRoe.mpg
-rw-r--r--   1 scnsma  1901925513 3706908 Mar 26 15:51 RiemfanX.mpg
-rw-r--r--   1 scnsma  1901925513 3044362 Mar 26 15:51 RiemfanXRoe.mpg
-rw-r--r--   1 scnsma  1901925513 1415310 Mar 26 15:51 RiemshockX.mpg
-rw-r--r--   1 scnsma  1901925513 2040763 Mar 26 15:51 RiemshockXRoe.mpg
lrwxr-xr-x   1 scnsma  1901925513        62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/presentations/
lrwxr-xr-x   1 scnsma  1901925513        67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/presentations/
lrwxr-xr-x   1 scnsma  1901925513        54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/presentations/
-rw-r--r--   1 scnsma  1901925513       196 Apr 14 08:54 mvoies
-rw-r--r--   1 scnsma  1901925513       228 Apr 14 08:53 mvoies~
-rw-r--r--   1 scnsma  1901925513 2849138 Mar 26 15:51 q_0.mpg
-rw-r--r--   1 scnsma  1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r--   1 scnsma  1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--   1 scnsma  1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
nathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
nathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pix/
NearCrit.mpg    fig_0.197/      fig_sbc/      fig_typeII/      makeall~*      preamble.te
README         fig_0.27/      fig_sbd/      fig_vprofile/      matt/      preamble.te
README~        fig_o/      fig_sbo/      img/      movie.mpg      pres.aux
a.mpg          fig_pc/      fig_staticstar/      makeall*      oldfigs/      pres.dvi
bak/          fig_primvarsolver/ fig_tov/      makeallwww*      omega.mpg      pres.log
nathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres.pdf
nathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
nathscnmacbook : info/perimeter-psi-april-2011/movies:
nathscnmacbook : info/perimeter-psi-april-2011/movies:
nathscnmacbook : info/perimeter-psi-april-2011/movies: ls

```



```

NearCrit.mpg@      RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      movie.mpg@
PRiem1001XRoe.mpg  RiemfanXRoe.mpg      RiemshockXRoe.mpg  dmdr_0.15.mpg@  ies
nathscnmacbook : info/perimeter-psi-april-2011/movies: dir
total 46736
lrwxr-xr-x  17 scnsma  1901925513      578 Apr 14 08:54 ./
lrwxr-xr-x  11 scnsma  1901925513      374 Apr 13 16:26 ../
lrwxr-xr-x   1 scnsma  1901925513        57 Apr 14 08:54 NearCrit.mpg@ -> /Users/scnsma/work/tex/presentations/
-rw-r--r--   1 scnsma  1901925513 1284141 Mar 26 15:51 PRiem1001XRoe.mpg
-rw-r--r--   1 scnsma  1901925513 3706908 Mar 26 15:51 RiemfanX.mpg
-rw-r--r--   1 scnsma  1901925513 3044362 Mar 26 15:51 RiemfanXRoe.mpg
-rw-r--r--   1 scnsma  1901925513 1415310 Mar 26 15:51 RiemshockX.mpg
-rw-r--r--   1 scnsma  1901925513 2040763 Mar 26 15:51 RiemshockXRoe.mpg
lrwxr-xr-x   1 scnsma  1901925513        62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/presentations/
lrwxr-xr-x   1 scnsma  1901925513        67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/presentations/
lrwxr-xr-x   1 scnsma  1901925513        54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/presentations/
-rw-r--r--   1 scnsma  1901925513       196 Apr 14 08:54 mvoies
-rw-r--r--   1 scnsma  1901925513       228 Apr 14 08:53 mvoies~
-rw-r--r--   1 scnsma  1901925513 2849138 Mar 26 15:51 q_0.mpg
-rw-r--r--   1 scnsma  1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r--   1 scnsma  1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--   1 scnsma  1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
nathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
nathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pix/
NearCrit.mpg    fig_0.197/      fig_sbc/      fig_typeII/      makeall~*      preamble.te
README         fig_0.27/      fig_sbd/      fig_vprofile/      matt/      preamble.te
README~        fig_o/      fig_sbo/      img/      movie.mpg      pres.aux
a.mpg          fig_pc/      fig_staticstar/      makeall*      oldfigs/      pres.dvi
bak/          fig_primvarsolver/ fig_tov/      makeallwww*      omega.mpg      pres.log
nathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres.pdf
nathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
nathscnmacbook : info/perimeter-psi-april-2011/movies:
nathscnmacbook : info/perimeter-psi-april-2011/movies:
nathscnmacbook : info/perimeter-psi-april-2011/movies: ls

```

```

NearCrit.mpg@      RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      movie.mpg@
PRiem1001XRoe.mpg  RiemfanXRoe.mpg      RiemshockXRoe.mpg  dmdr_0.15.mpg@  ies
nathscnmacbook : info/perimeter-psi-april-2011/movies: dir
total 46736
lrwxr-xr-x  17 scnsma  1901925513      578 Apr 14 08:54 ./
lrwxr-xr-x  11 scnsma  1901925513      374 Apr 13 16:26 ../
lrwxr-xr-x   1 scnsma  1901925513        57 Apr 14 08:54 NearCrit.mpg@ -> /Users/scnsma/work/tex/presentati
-rw-r--r--   1 scnsma  1901925513 1284141 Mar 26 15:51 PRiem1001XRoe.mpg
-rw-r--r--   1 scnsma  1901925513 3706908 Mar 26 15:51 RiemfanX.mpg
-rw-r--r--   1 scnsma  1901925513 3044362 Mar 26 15:51 RiemfanXRoe.mpg
-rw-r--r--   1 scnsma  1901925513 1415310 Mar 26 15:51 RiemshockX.mpg
-rw-r--r--   1 scnsma  1901925513 2040763 Mar 26 15:51 RiemshockXRoe.mpg
lrwxr-xr-x   1 scnsma  1901925513        62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/presentations/
lrwxr-xr-x   1 scnsma  1901925513        67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/presentat
lrwxr-xr-x   1 scnsma  1901925513        54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/presentations
-rw-r--r--   1 scnsma  1901925513       196 Apr 14 08:54 mvoies
-rw-r--r--   1 scnsma  1901925513       228 Apr 14 08:53 mvoies~
-rw-r--r--   1 scnsma  1901925513 2849138 Mar 26 15:51 q_0.mpg
-rw-r--r--   1 scnsma  1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r--   1 scnsma  1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--   1 scnsma  1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
nathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
nathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pix/
NearCrit.mpg    fig_0.197/      fig_sbc/      fig_typeII/      makeall~*      preamble.te
README         fig_0.27/      fig_sbd/      fig_vprofile/      matt/      preamble.te
README~        fig_o/      fig_sbo/      img/      movie.mpg      pres.aux
a.mpg          fig_pc/      fig_staticstar/      makeall*      oldfigs/      pres.dvi
bak/          fig_primvarsolver/ fig_tov/      makeallwww*      omega.mpg      pres.log
nathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres.pdf
nathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
nathscnmacbook : info/perimeter-psi-april-2011/movies:
nathscnmacbook : info/perimeter-psi-april-2011/movies:
nathscnmacbook : info/perimeter-psi-april-2011/movies: ls

```



```

ckX.mpg      dmdr.mpg@      movie.mpg@      mvoies~      q_0q_2c_0.mpg
ckXRoe.mpg   dmdr_0.15.mpg@      mvoies         q_0.mpg      q_0q_c_0.mpg
iir

./
./
NearCrit.mpg@ -> /Users/scnsma/work/tex/presentations/defense/NearCrit.mpg
PRiem1001XRoe.mpg
RiemfanX.mpg
RiemfanXRoe.mpg
RiemshockX.mpg
RiemshockXRoe.mpg
dmdr.mpg@ -> /Users/scnsma/work/tex/presentations/defense/fig_0.27/dmdr.mpg
dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/presentations/defense/fig_0.15/dmdr_0.15.mpg
movie.mpg@ -> /Users/scnsma/work/tex/presentations/defense/movie.mpg
mvoies
mvoies~
q_0.mpg
q_0q_2c_0.mpg
q_0q_c_0.mpg
q_0q_nc_0.mpg
open dmdr.mpg
open ~/work/tex/presentations/defense/
  fig_typeI/      makeallwww~*      pix/      pres.out      pres_www.dvi      pres_www.
  fig_typeII/     makeall~*        preamble.tex      pres.pdf      pres_www.log      pspace.ep
  fig_vprofile/   matt/            preamble.tex~     pres.ps      pres_www.out      ref/
  img/            movie.mpg        pres.aux          pres.tex     pres_www.pdf      scvpres.t
  makeall*        oldfigs/         pres.dvi          pres.tex~    pres_www.ps       v.mpg
  makeallwww*     omega.mpg        pres.log          pres_www.aux pres_www.tex
ln -s ~/work/tex/presentations/defense/pres.pdf
open pres.pdf

```



tcsh

mpg	dmdr.mpg@	movie.mpg@	mvoies~	q_0q_2c_0.mpg
	dmdr_0.15.mpg@	mvoies	q_0.mpg	q_0q_c_0.mpg

```
it.mpg@ -> /Users/scnsma/work/tex/presentations/defense/NearCrit.mpg
```

```
001XRoe.mpg
```

```
nX.mpg
```

```
nXRoe.mpg
```

```
ockX.mpg
```

```
ockXRoe.mpg
```

```
pg@ -> /Users/scnsma/work/tex/presentations/defense/fig_0.27/dmdr.mpg
```

```
.15.mpg@ -> /Users/scnsma/work/tex/presentations/defense/fig_0.15/dmdr_0.15.mpg
```

```
mpg@ -> /Users/scnsma/work/tex/presentations/defense/movie.mpg
```

```
~
```

```
g
```

```
c_0.mpg
```

```
_0.mpg
```

```
c_0.mpg
```

```
dr.mpg
```

```
work/tex/presentations/defense/
```

ypeI/	makeallwww~*	pix/	pres.out	pres_www.dvi	pres_www.tex~
ypeII/	makeall~*	preamble.tex	pres.pdf	pres_www.log	pspace.eps
profile/	matt/	preamble.tex~	pres.ps	pres_www.out	ref/
	movie.mpg	pres.aux	pres.tex	pres_www.pdf	scvpres.tex
ll*	oldfigs/	pres.dvi	pres.tex~	pres_www.ps	v.mpg
llwww*	omega.mpg	pres.log	pres_www.aux	pres_www.tex	
~/work/tex/presentations/defense/pres.pdf					
es.pdf					


```

apq@      movie.mpg@      mvoies~      q_0q_2c_0.mpg      q_0q_nc_0.mpg
          mvoies          q_0.mpg      q_0q_c_0.mpg

```

```
isma/work/tex/presentations/defense/NearCrit.mpg
```

```

/work/tex/presentations/defense/fig_0.27/dmdr.mpg
nsma/work/tex/presentations/defense/fig_0.15/dmdr_0.15.mpg
/work/tex/presentations/defense/movie.mpg

```

```

ns/defense/
lwww~*      pix/      pres.out      pres_www.dvi      pres_www.tex~
l~*         preamble.tex  pres.pdf      pres_www.log      pspace.eps
            preamble.tex~  pres.ps      pres_www.out      ref/
apq          pres.aux      pres.tex      pres_www.pdf      scvpres.tex
s/           pres.dvi      pres.tex~     pres_www.ps       v.mpg
apq          pres.log      pres_www.aux  pres_www.tex
ions/defense/pres.pdf

```



tcsh

tcsh

tcsh

```

.mp@
1XRoe.mp RiempfanX.mp RiempshockX.mp dmdr.mp@ movie.mp@
acbook : info/perimeter-psi-april-2011/movies: dir
736
-x 17 scnsma 1901925513 578 Apr 14 08:54 ./
-x 11 scnsma 1901925513 374 Apr 13 16:26 ../
-x 1 scnsma 1901925513 57 Apr 14 08:54 NearCrit.mp@ -> /Users/scnsma/work/tex/presentations/def
-- 1 scnsma 1901925513 1284141 Mar 26 15:51 PRiem1001XRoe.mp
-- 1 scnsma 1901925513 3706908 Mar 26 15:51 RiempfanX.mp
-- 1 scnsma 1901925513 3044362 Mar 26 15:51 RiempfanXRoe.mp
-- 1 scnsma 1901925513 1415310 Mar 26 15:51 RiempshockX.mp
-- 1 scnsma 1901925513 2040763 Mar 26 15:51 RiempshockXRoe.mp
-x 1 scnsma 1901925513 62 Apr 14 08:54 dmdr.mp@ -> /Users/scnsma/work/tex/presentations/defense
-x 1 scnsma 1901925513 67 Apr 14 08:54 dmdr_0.15.mp@ -> /Users/scnsma/work/tex/presentations/de
-x 1 scnsma 1901925513 54 Apr 14 08:54 movie.mp@ -> /Users/scnsma/work/tex/presentations/defens
-- 1 scnsma 1901925513 196 Apr 14 08:54 mvoies
-- 1 scnsma 1901925513 228 Apr 14 08:53 mvoies~
-- 1 scnsma 1901925513 2849138 Mar 26 15:51 q_0.mp
-- 1 scnsma 1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mp
-- 1 scnsma 1901925513 3344373 Mar 26 15:51 q_0q_c_0.mp
-- 1 scnsma 1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mp
acbook : info/perimeter-psi-april-2011/movies: open dmdr.mp
acbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
ST fig_0.15/ fig_pspace/ fig_typeI/ makeallwww~* pix/
.mp fig_0.197/ fig_sbc/ fig_typeII/ makeall~* preamble.tex
fig_0.27/ fig_sbd/ fig_vprofile/ matt/ preamble.tex~
fig_o/ fig_sbo/ img/ movie.mp pres.aux
fig_pc/ fig_staticstar/ makeall* oldfigs/ pres.dvi
fig_primvarsolver/ fig_tov/ makeallwww* omega.mp pres.log
acbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres.pdf
acbook : info/perimeter-psi-april-2011/movies: open pres.pdf
acbook : info/perimeter-psi-april-2011/movies:
acbook : info/perimeter-psi-april-2011/movies:
acbook : info/perimeter-psi-april-2011/movies: ls

```



```

acbook : info/perimeter-psi-april-2011/movies: dir
736
-x 17 scnsma 1901925513      578 Apr 14 08:54 ./
-x 11 scnsma 1901925513      374 Apr 13 16:26 ../
-x 1  scnsma 1901925513       57 Apr 14 08:54 NearCrit.mpg@ -> /Users/scnsma/work/tex/presentations/def
-- 1  scnsma 1901925513    1284141 Mar 26 15:51 PRiem1001XRoe.mpg
-- 1  scnsma 1901925513    3706908 Mar 26 15:51 RiemfanX.mpg
-- 1  scnsma 1901925513    3044362 Mar 26 15:51 RiemfanXRoe.mpg
-- 1  scnsma 1901925513    1415310 Mar 26 15:51 RiemshockX.mpg
-- 1  scnsma 1901925513    2040763 Mar 26 15:51 RiemshockXRoe.mpg
-x 1  scnsma 1901925513       62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/presentations/defense
-x 1  scnsma 1901925513       67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/presentations/de
-x 1  scnsma 1901925513       54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/presentations/defens
-- 1  scnsma 1901925513      196 Apr 14 08:54 mvoies
-- 1  scnsma 1901925513      228 Apr 14 08:53 mvoies~
-- 1  scnsma 1901925513    2849138 Mar 26 15:51 q_0.mpg
-- 1  scnsma 1901925513    2944127 Mar 26 15:51 q_0q_2c_0.mpg
-- 1  scnsma 1901925513    3344373 Mar 26 15:51 q_0q_c_0.mpg
-- 1  scnsma 1901925513    3255932 Mar 26 15:51 q_0q_nc_0.mpg
acbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
acbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
ST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pix/
.mpg     fig_0.197/      fig_sbc/         fig_typeII/     makeall~*         preamble.tex
        fig_0.27/      fig_sbd/         fig_vprofile/   matt/             preamble.tex~
        fig_o/        fig_sbo/         img/            movie.mpg         pres.aux
        fig_pc/       fig_staticstar/  makeall*        oldfigs/          pres.dvi
        fig_primvarsolver/ fig_tov/        makeallwww*     omega.mpg         pres.log
acbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres.pdf
acbook : info/perimeter-psi-april-2011/movies: open pres.pdf
acbook : info/perimeter-psi-april-2011/movies:
acbook : info/perimeter-psi-april-2011/movies:
acbook : info/perimeter-psi-april-2011/movies: ls
.mpg@      RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      movie.mpg@
1XRoe.mpg  RiemfanXRoe.mpg  RiemshockXRoe.mpg  dmdr_0.15.mpg@  mvoies

```

```

tcsh
-x 17 scnsma 1901925513 578 Apr 14 08:54 ./
-x 11 scnsma 1901925513 374 Apr 13 16:26 ./
-x 1 scnsma 1901925513 57 Apr 14 08:54 NearCrit.mpg@ -> /Users/scnsma/work/tex/presentations/def
-- 1 scnsma 1901925513 1284141 Mar 26 15:51 PRiem1001XRoe.mpg
-- 1 scnsma 1901925513 3706908 Mar 26 15:51 RiemfanX.mpg
-- 1 scnsma 1901925513 3044362 Mar 26 15:51 RiemfanXRoe.mpg
-- 1 scnsma 1901925513 1415310 Mar 26 15:51 RiemshockX.mpg
-- 1 scnsma 1901925513 2040763 Mar 26 15:51 RiemshockXRoe.mpg
-x 1 scnsma 1901925513 62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/presentations/defense
-x 1 scnsma 1901925513 67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/presentations/de
-x 1 scnsma 1901925513 54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/presentations/defens
-- 1 scnsma 1901925513 196 Apr 14 08:54 mvoies
-- 1 scnsma 1901925513 228 Apr 14 08:53 mvoies~
-- 1 scnsma 1901925513 2849138 Mar 26 15:51 q_0.mpg
-- 1 scnsma 1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
-- 1 scnsma 1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-- 1 scnsma 1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
acbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
acbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
ST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pix/
.mpg     fig_0.197/      fig_sbc/         fig_typeII/     makeall~*         preamble.tex
        fig_0.27/      fig_sbd/         fig_vprofile/   matt/             preamble.tex~
        fig_o/        fig_sbo/         img/            movie.mpg         pres.aux
        fig_pc/       fig_staticstar/  makeall*        oldfigs/          pres.dvi
        fig_primvarsolver/ fig_tov/         makeallwww*     omega.mpg         pres.log
acbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres.pdf
acbook : info/perimeter-psi-april-2011/movies: open pres.pdf
acbook : info/perimeter-psi-april-2011/movies:
acbook : info/perimeter-psi-april-2011/movies:
acbook : info/perimeter-psi-april-2011/movies: ls
.mpg@    RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      movie.mpg@
1XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg   dmdr_0.15.mpg@ mvoies
acbook : info/perimeter-psi-april-2011/movies: ls q0*
atch.

```



```

tcsh
-x 1 scnsma 1901925513 57 Apr 14 08:54 NearCrit.mpg@ -> /Users/scnsma/work/tex/presentations/def
-- 1 scnsma 1901925513 1284141 Mar 26 15:51 PRiem1001XRoe.mpg
-- 1 scnsma 1901925513 3706908 Mar 26 15:51 RiemfanX.mpg
-- 1 scnsma 1901925513 3044362 Mar 26 15:51 RiemfanXRoe.mpg
-- 1 scnsma 1901925513 1415310 Mar 26 15:51 RiemshockX.mpg
-- 1 scnsma 1901925513 2040763 Mar 26 15:51 RiemshockXRoe.mpg
-x 1 scnsma 1901925513 62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/presentations/defense
-x 1 scnsma 1901925513 67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/presentations/de
-x 1 scnsma 1901925513 54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/presentations/defens
-- 1 scnsma 1901925513 196 Apr 14 08:54 mvoies
-- 1 scnsma 1901925513 228 Apr 14 08:53 mvoies~
-- 1 scnsma 1901925513 2849138 Mar 26 15:51 q_0.mpg
-- 1 scnsma 1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
-- 1 scnsma 1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-- 1 scnsma 1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
acbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
acbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
ST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pix/
.mpg    fig_0.197/      fig_sbc/         fig_typeII/     makeall~*         preamble.tex
      fig_0.27/      fig_sbd/         fig_vprofile/   matt/             preamble.tex~
      fig_o/        fig_sbo/         img/            movie.mpg         pres.aux
      fig_pc/       fig_staticstar/  makeall*        oldfigs/          pres.dvi
      fig_primvarsolver/ fig_tov/        makeallwww*     omega.mpg         pres.log
acbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres.pdf
acbook : info/perimeter-psi-april-2011/movies: open pres.pdf
acbook : info/perimeter-psi-april-2011/movies:
acbook : info/perimeter-psi-april-2011/movies:
acbook : info/perimeter-psi-april-2011/movies: ls
.mpg@      RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      movie.mpg@
1XRoe.mpg  RiemfanXRoe.mpg  RiemshockXRoe.mpg  dmdr_0.15.mpg@ mvoies
acbook : info/perimeter-psi-april-2011/movies: ls q0*
atch.
acbook : info/perimeter-psi-april-2011/movies: ls q
q_0q_2c_0.mpg q_0q_c_0.mpg q_0q_nc_0.mpg

```

```

x      tssh      x      tssh      x      tssh
lrwxr-xr-x  1 scnsma  1901925513      57 Apr 14 08:54 NearCrit.mpg@ -> /Users/scnsma/work/tex/p
-rw-r--r--  1 scnsma  1901925513 1284141 Mar 26 15:51 PRiem1001XRoe.mpg
-rw-r--r--  1 scnsma  1901925513 3706908 Mar 26 15:51 RiemfanX.mpg
-rw-r--r--  1 scnsma  1901925513 3044362 Mar 26 15:51 RiemfanXRoe.mpg
-rw-r--r--  1 scnsma  1901925513 1415310 Mar 26 15:51 RiemshockX.mpg
-rw-r--r--  1 scnsma  1901925513 2040763 Mar 26 15:51 RiemshockXRoe.mpg
lrwxr-xr-x  1 scnsma  1901925513      62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/prese
lrwxr-xr-x  1 scnsma  1901925513      67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/
lrwxr-xr-x  1 scnsma  1901925513      54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r--  1 scnsma  1901925513     196 Apr 14 08:54 mvoies
-rw-r--r--  1 scnsma  1901925513     228 Apr 14 08:53 mvoies~
-rw-r--r--  1 scnsma  1901925513 2849138 Mar 26 15:51 q_0.mpg
-rw-r--r--  1 scnsma  1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma  1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/    fig_sbc/      fig_typeII/      makeall~*      pr
README         fig_0.27/    fig_sbd/      fig_vprofile/    matt/      pr
README~        fig_o/      fig_sbo/      img/      movie.mpg      pr
a.mpg          fig_pc/      fig_staticstar/  makeall*      oldfigs/      pr
bak/           fig_primvarsolver/ fig_tov/      makeallwww*      omega.mpg      pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@      RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      m
PRiem1001XRoe.mpg  RiemfanXRoe.mpg  RiemshockXRoe.mpg  dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg

```



```

x      tssh      x      tssh      x      tssh
lrwxr-xr-x  1 scnsma 1901925513      57 Apr 14 08:54 NearCrit.mpg@ -> /Users/scnsma/work/tex/p
-rw-r--r--  1 scnsma 1901925513 1284141 Mar 26 15:51 PRiem1001XRoe.mpg
-rw-r--r--  1 scnsma 1901925513 3706908 Mar 26 15:51 RiemfanX.mpg
-rw-r--r--  1 scnsma 1901925513 3044362 Mar 26 15:51 RiemfanXRoe.mpg
-rw-r--r--  1 scnsma 1901925513 1415310 Mar 26 15:51 RiemshockX.mpg
-rw-r--r--  1 scnsma 1901925513 2040763 Mar 26 15:51 RiemshockXRoe.mpg
lrwxr-xr-x  1 scnsma 1901925513      62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/prese
lrwxr-xr-x  1 scnsma 1901925513      67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/
lrwxr-xr-x  1 scnsma 1901925513      54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r--  1 scnsma 1901925513      196 Apr 14 08:54 mvoies
-rw-r--r--  1 scnsma 1901925513      228 Apr 14 08:53 mvoies~
-rw-r--r--  1 scnsma 1901925513 2849138 Mar 26 15:51 q_0.mpg
-rw-r--r--  1 scnsma 1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma 1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma 1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/    fig_sbc/      fig_typeII/      makeall~*      pr
README         fig_0.27/    fig_sbd/      fig_vprofile/    matt/      pr
README~        fig_o/      fig_sbo/      img/      movie.mpg      pr
a.mpg          fig_pc/      fig_staticstar/ makeall*      oldfigs/      pr
bak/           fig_primvarsolver/ fig_tov/      makeallwww*      omega.mpg      pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@      RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      m
PRiem1001XRoe.mpg  RiemfanXRoe.mpg  RiemshockXRoe.mpg  dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg

```

```

x tcsh x tcsh x tcsh
-rw-r--r-- 1 scnsma 1901925513 1284141 Mar 26 15:51 PRiem1001XRoe.mpg
-rw-r--r-- 1 scnsma 1901925513 3706908 Mar 26 15:51 RiemfanX.mpg
-rw-r--r-- 1 scnsma 1901925513 3044362 Mar 26 15:51 RiemfanXRoe.mpg
-rw-r--r-- 1 scnsma 1901925513 1415310 Mar 26 15:51 RiemshockX.mpg
-rw-r--r-- 1 scnsma 1901925513 2040763 Mar 26 15:51 RiemshockXRoe.mpg
lrwxr-xr-x 1 scnsma 1901925513 62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/prese
lrwxr-xr-x 1 scnsma 1901925513 67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/
lrwxr-xr-x 1 scnsma 1901925513 54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r-- 1 scnsma 1901925513 196 Apr 14 08:54 mvoies
-rw-r--r-- 1 scnsma 1901925513 228 Apr 14 08:53 mvoies~
-rw-r--r-- 1 scnsma 1901925513 2849138 Mar 26 15:51 q_0.mpg
-rw-r--r-- 1 scnsma 1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r-- 1 scnsma 1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r-- 1 scnsma 1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/    fig_sbc/          fig_typeII/     makeall~*         pr
README         fig_0.27/    fig_sbd/          fig_vprofile/   matt/             pr
README~        fig_o/       fig_sbo/          img/            movie.mpg         pr
a.mpg          fig_pc/      fig_staticstar/   makeall*        oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/         makeallwww*     omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@      RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      m
PRiem1001XRoe.mpg  RiemfanXRoe.mpg   RiemshockXRoe.mpg   dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*

```


q_0.mpg

1/257 (257)

(1.5e+00, 1.2e+00)

0.00

q_0



00:00:00



-00:00:08

```
q_0.mpg
mpg
mpg
be.mpg
~/Users/scnsma/work/tex/prese
og@ -> /Users/scnsma/work/tex/
-> /Users/scnsma/work/tex/pres

og
I
og
I
tex/presentations/defense/
    makeallww~*    pi
    makeall~*      pr
    matt/          pr
    movie.mpg      pr
    oldfigs/       pr
    omega.mpg      pr
~/tex/presentations/defense/pr

dmdr.mpg@
dmdr_0.15.mpg@
```

```

x tcsh x tcsh x tcsh
-rw-r--r-- 1 scnsma 1901925513 1284141 Mar 26 15:51 PRiem1001XRoe.mpg
-rw-r--r-- 1 scnsma 1901925513 3706908 Mar 26 15:51 RiemfanX.mpg
-rw-r--r-- 1 scnsma 1901925513 3044362 Mar 26 15:51 RiemfanXRoe.mpg
-rw-r--r-- 1 scnsma 1901925513 1415310 Mar 26 15:51 RiemshockX.mpg
-rw-r--r-- 1 scnsma 1901925513 2040763 Mar 26 15:51 RiemshockXRoe.mpg
lrwxr-xr-x 1 scnsma 1901925513 62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/prese
lrwxr-xr-x 1 scnsma 1901925513 67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/
lrwxr-xr-x 1 scnsma 1901925513 54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r-- 1 scnsma 1901925513 196 Apr 14 08:54 mvoies
-rw-r--r-- 1 scnsma 1901925513 228 Apr 14 08:53 mvoies~
-rw-r--r-- 1 scnsma 1901925513 2849138 Mar 26 15:51 q_0.mpg
-rw-r--r-- 1 scnsma 1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r-- 1 scnsma 1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r-- 1 scnsma 1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/    fig_sbc/          fig_typeII/     makeall~*         pr
README         fig_0.27/    fig_sbd/          fig_vprofile/   matt/             pr
README~        fig_o/       fig_sbo/          img/            movie.mpg         pr
a.mpg          fig_pc/      fig_staticstar/   makeall*        oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/         makeallwww*     omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@    RiemfanX.mpg    RiemshockX.mpg    dmdr.mpg@      m
PRiem1001XRoe.mpg RiemfanXRoe.mpg RiemshockXRoe.mpg dmdr_0.15.mpg@ m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg          q_0q_2c_0.mpg  q_0q_c_0.mpg     q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*

```



```

tcsch
-rw-r--r-- 1 scnsma 1901925513 1284141 Mar 26 15:51 PRiem1001XRoe.mpg
-rw-r--r-- 1 scnsma 1901925513 3706908 Mar 26 15:51 RiemfanX.mpg
-rw-r--r-- 1 scnsma 1901925513 3044362 Mar 26 15:51 RiemfanXRoe.mpg
-rw-r--r-- 1 scnsma 1901925513 1415310 Mar 26 15:51 RiemshockX.mpg
-rw-r--r-- 1 scnsma 1901925513 2040763 Mar 26 15:51 RiemshockXRoe.mpg
lrwxr-xr-x 1 scnsma 1901925513 62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/prese
lrwxr-xr-x 1 scnsma 1901925513 67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/
lrwxr-xr-x 1 scnsma 1901925513 54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r-- 1 scnsma 1901925513 196 Apr 14 08:54 mvoies
-rw-r--r-- 1 scnsma 1901925513 228 Apr 14 08:53 mvoies~
-rw-r--r-- 1 scnsma 1901925513 2849138 Mar 26 15:51 q_0.mpg
-rw-r--r-- 1 scnsma 1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r-- 1 scnsma 1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r-- 1 scnsma 1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/    fig_sbc/         fig_typeII/     makeall~*         pr
README         fig_0.27/    fig_sbd/         fig_vprofile/   matt/             pr
README~        fig_o/       fig_sbo/         img/            movie.mpg         pr
a.mpg          fig_pc/      fig_staticstar/  makeall*        oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/        makeallwww*     omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg   RiemshockX.mpg   dmdr.mpg@       m
PRiem1001XRoe.mpg RiemfanXRoe.mpg RiemshockXRoe.mpg dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg      q_0q_2c_0.mpg q_0q_c_0.mpg q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*

```

```

x      tssh      x      tssh      x      tssh
-rw-r--r--  1 scnsma  1901925513  1284141 Mar  26  15:51 PRiem1001XRoe.mpg
-rw-r--r--  1 scnsma  1901925513  3706908 Mar  26  15:51 RiemfanX.mpg
-rw-r--r--  1 scnsma  1901925513  3044362 Mar  26  15:51 RiemfanXRoe.mpg
-rw-r--r--  1 scnsma  1901925513  1415310 Mar  26  15:51 RiemshockX.mpg
-rw-r--r--  1 scnsma  1901925513  2040763 Mar  26  15:51 RiemshockXRoe.mpg
lrwxr-xr-x  1 scnsma  1901925513      62 Apr  14  08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/prese
lrwxr-xr-x  1 scnsma  1901925513      67 Apr  14  08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/
lrwxr-xr-x  1 scnsma  1901925513      54 Apr  14  08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r--  1 scnsma  1901925513     196 Apr  14  08:54 mvoies
-rw-r--r--  1 scnsma  1901925513     228 Apr  14  08:53 mvoies~
-rw-r--r--  1 scnsma  1901925513  2849138 Mar  26  15:51 q_0.mpg
-rw-r--r--  1 scnsma  1901925513  2944127 Mar  26  15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3344373 Mar  26  15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar  26  15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/      fig_sbc/          fig_typeII/      makeall~*          pr
README          fig_0.27/      fig_sbd/          fig_vprofile/    matt/              pr
README~         fig_o/         fig_sbo/          img/             movie.mpg          pr
a.mpg           fig_pc/        fig_staticstar/   makeall*         oldfigs/           pr
bak/            fig_primvarsolver/ fig_tov/         makeallwww*      omega.mpg          pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      {   RiemshockX.mpg      dmdr.mpg@          m
PRiem1001XRoe.mpg RiemfanXRoe.mpg   {   RiemshockXRoe.mpg   dmdr_0.15.mpg@     m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*

```



```

x      tssh      x      tssh      x      tssh
-rw-r--r--  1 scnsma  1901925513  1284141 Mar  26  15:51 PRiem1001XRoe.mpg
-rw-r--r--  1 scnsma  1901925513  3706908 Mar  26  15:51 RiemfanX.mpg
-rw-r--r--  1 scnsma  1901925513  3044362 Mar  26  15:51 RiemfanXRoe.mpg
-rw-r--r--  1 scnsma  1901925513  1415310 Mar  26  15:51 RiemshockX.mpg
-rw-r--r--  1 scnsma  1901925513  2040763 Mar  26  15:51 RiemshockXRoe.mpg
lrwxr-xr-x  1 scnsma  1901925513      62 Apr  14  08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/prese
lrwxr-xr-x  1 scnsma  1901925513      67 Apr  14  08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/
lrwxr-xr-x  1 scnsma  1901925513      54 Apr  14  08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r--  1 scnsma  1901925513     196 Apr  14  08:54 mvoies
-rw-r--r--  1 scnsma  1901925513     228 Apr  14  08:53 mvoies~
-rw-r--r--  1 scnsma  1901925513  2849138 Mar  26  15:51 q_0.mpg
-rw-r--r--  1 scnsma  1901925513  2944127 Mar  26  15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3344373 Mar  26  15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar  26  15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/    fig_sbc/         fig_typeII/     makeall~*         pr
README         fig_0.27/    fig_sbd/         fig_vprofile/   matt/             pr
README~        fig_o/       fig_sbo/         img/            movie.mpg         pr
a.mpg          fig_pc/      fig_staticstar/  makeall*        oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/        makeallwww*     omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@      RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      m
PRiem1001XRoe.mpg  RiemfanXRoe.mpg  RiemshockXRoe.mpg  dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*

```

```

x      tssh      x      tssh      x      tssh
-rw-r--r--  1 scnsma  1901925513  1284141 Mar  26  15:51 PRiem1001XRoe.mpg
-rw-r--r--  1 scnsma  1901925513  3706908 Mar  26  15:51 RiemfanX.mpg
-rw-r--r--  1 scnsma  1901925513  3044362 Mar  26  15:51 RiemfanXRoe.mpg
-rw-r--r--  1 scnsma  1901925513  1415310 Mar  26  15:51 RiemshockX.mpg
-rw-r--r--  1 scnsma  1901925513  2040763 Mar  26  15:51 RiemshockXRoe.mpg
lrwxr-xr-x  1 scnsma  1901925513      62 Apr  14  08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/prese
lrwxr-xr-x  1 scnsma  1901925513      67 Apr  14  08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/
lrwxr-xr-x  1 scnsma  1901925513      54 Apr  14  08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r--  1 scnsma  1901925513     196 Apr  14  08:54 mvoies
-rw-r--r--  1 scnsma  1901925513     228 Apr  14  08:53 mvoies~
-rw-r--r--  1 scnsma  1901925513  2849138 Mar  26  15:51 q_0.mpg
-rw-r--r--  1 scnsma  1901925513  2944127 Mar  26  15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3344373 Mar  26  15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar  26  15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/    fig_sbc/         fig_typeII/     makeall~*         pr
README         fig_0.27/    fig_sbd/         fig_vprofile/   matt/             pr
README~        fig_o/       fig_sbo/         img/            movie.mpg         pr
a.mpg          fig_pc/      fig_staticstar/  makeall*        oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/        makeallwww*     omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@      RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      m
PRiem1001XRoe.mpg  RiemfanXRoe.mpg   RiemshockXRoe.mpg   dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*

```

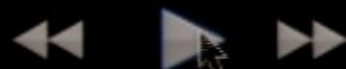

RiemshockX.mpg

1/257 (257)

(1.5e+00, 1.2e+00)

0.00

Riem shock: X



00:00:00



-00:00:08

```
mpg
mpg
be.mpg
- /Users/scnsma/work/tex/prese
og@ -> /Users/scnsma/work/tex/
-> /Users/scnsma/work/tex/pres

og
r
og
r
tex/presentations/defense/
    makeallwww~*      pi
    makeall~*         pr
le/    matt/          pr
    movie.mpg         pr
    oldfigs/          pr
    omega.mpg         pr
c:/tex/presentations/defense/pr

dmdr.mpg@
dmdr_0.15.mpg@
```

tcs

tcs

tcs

55/257 (257)

(1.5e+00 , 1.2e+00)

0.21

Riem shock: X

```
mpg
mpg
be.mpg
/Users/scnsma/work/tex/pres
og@ -> /Users/scnsma/work/tex/
-> /Users/scnsma/work/tex/pres

og
r
og
r
tex/presentations/defense/
    makeallwww~*      pi
    makeall~*         pr
le/    matt/          pr
    movie.mpg         pr
    oldfigs/          pr
    omega.mpg         pr
c/tex/presentations/defense/pr

dmdr.mpg@
dmdr_0.15.mpg@
```


tcs

tcs

tcs

RiemshockX.mpg

256/257 (257)

(1.5e+00, 1.2e+00)

1.00

Riem shock: X

mpg

mpg

pe.mpg

/Users/scnsma/work/tex/pres

og@ -> /Users/scnsma/work/tex/

-> /Users/scnsma/work/tex/pres

og

og

tex/presentations/defense/

makeallwww~* pi

makeall~* pr

le/ matt/ pr

movie.mpg pr

oldfigs/ pr

omega.mpg pr

c/tex/presentations/defense/pr

dmdr.mpg@

dmdr_0.15.mpg@

00:00:08

-00:00:00

```

tcsch
-rw-r--r-- 1 scnsma 1901925513 3706908 Mar 26 15:51 RiempfanX.mpg
-rw-r--r-- 1 scnsma 1901925513 3044362 Mar 26 15:51 RiempfanXRoe.mpg
-rw-r--r-- 1 scnsma 1901925513 1415310 Mar 26 15:51 RiempshockX.mpg
-rw-r--r-- 1 scnsma 1901925513 2040763 Mar 26 15:51 RiempshockXRoe.mpg
lrwxr-xr-x 1 scnsma 1901925513 62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/pres
lrwxr-xr-x 1 scnsma 1901925513 67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/
lrwxr-xr-x 1 scnsma 1901925513 54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r-- 1 scnsma 1901925513 196 Apr 14 08:54 mvoies
-rw-r--r-- 1 scnsma 1901925513 228 Apr 14 08:53 mvoies~
-rw-r--r-- 1 scnsma 1901925513 2849138 Mar 26 15:51 q_0.mpg
-rw-r--r-- 1 scnsma 1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r-- 1 scnsma 1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r-- 1 scnsma 1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/    fig_sbc/          fig_typeII/     makeall~*         pr
README         fig_0.27/    fig_sbd/          fig_vprofile/   matt/             pr
README~        fig_o/       fig_sbo/          img/            movie.mpg         pr
a.mpg          fig_pc/      fig_staticstar/   makeall*        oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/         makeallwww*     omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@    RiempfanX.mpg    RiempshockX.mpg    dmdr.mpg@      m
PRiem1001XRoe.mpg RiempfanXRoe.mpg RiempshockXRoe.mpg dmdr_0.15.mpg@ m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg

```



```

x      tssh      x      tssh      x      tssh
-rw-r--r--  1 scnsma  1901925513  3706908 Mar  26 15:51 RiempfanX.mpg
-rw-r--r--  1 scnsma  1901925513  3044362 Mar  26 15:51 RiempfanXRoe.mpg
-rw-r--r--  1 scnsma  1901925513  1415310 Mar  26 15:51 RiempshockX.mpg
-rw-r--r--  1 scnsma  1901925513  2040763 Mar  26 15:51 RiempshockXRoe.mpg
lrwxr-xr-x  1 scnsma  1901925513      62 Apr  14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/prese
lrwxr-xr-x  1 scnsma  1901925513      67 Apr  14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/
lrwxr-xr-x  1 scnsma  1901925513      54 Apr  14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r--  1 scnsma  1901925513     196 Apr  14 08:54 mvoies
-rw-r--r--  1 scnsma  1901925513     228 Apr  14 08:53 mvoies~
-rw-r--r--  1 scnsma  1901925513  2849138 Mar  26 15:51 q_0.mpg
-rw-r--r--  1 scnsma  1901925513  2944127 Mar  26 15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3344373 Mar  26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar  26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/    fig_sbc/      fig_typeII/      makeall~*      pr
README         fig_0.27/    fig_sbd/      fig_vprofile/    matt/      pr
README~        fig_o/      fig_sbo/      img/      movie.mpg      pr
a.mpg          fig_pc/      fig_staticstar/  makeall*      oldfigs/      pr
bak/          fig_primvarsolver/ fig_tov/      makeallwww*      omega.mpg      pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@      RiempfanX.mpg      RiempshockX.mpg      dmdr.mpg@      m
PRiem1001XRoe.mpg  RiempfanXRoe.mpg  RiempshockXRoe.mpg  dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg

```

tcsH

tcsH

tcsH

RiemshockXRoe.mpg

1/256 (514)

(1.5e+00, 1.2e+00)

0.00

Riem shock: X & Roe



00:00:00



-00:00:08

```
mpg
apg
be.mpg
- /Users/scnsma/work/tex/prese
pg@ -> /Users/scnsma/work/tex/
-> /Users/scnsma/work/tex/pres
pg
I
pg
I
tex/presentations/defense/
makeallwww~* pi
makeall~* pr
e/ matt/ pr
movie.mpg pr
oldfigs/ pr
omega.mpg pr
t/tex/presentations/defense/pr
dmdr.mpg@ m
dmdr_0.15.mpg@ m
```


tcs

tcs

tcs

78/256 (514)

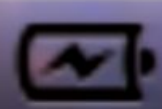
(1.5e+00 , 1.2e+00)

0.30

Riem shock: X & Roe

mpg
mpg
oe.mpg
- /Users/scnsma/work/tex/pres
bg@ -> /Users/scnsma/work/tex/
-> /Users/scnsma/work/tex/pres
bg
f
bg
f
tex/presentations/defense/
makeallwww~* pi
makeall~* pr
e/ matt/ pr
movie.mpg pr
oldfigs/ pr
omega.mpg pr
t/tex/presentations/defense/pr
dmdr.mpg@ m
dmdr_0.15.mpg@ m

View Share Window Help



tcsch



tcsch

EE42 - 0044040 May 04 15:54 T3 awfawYTba mpg

lockXRoe.mpg

(1.5e+00 , 1.2e+00)

apg

be.mpg

/Users

og@ -> /

-> /User

Riem shock: X & Roe



tcsch



tcsch



tcsch

256/256 (514)

(1.5e+00 , 1.2e+00)

1.00

Riem shock: X & Roe

mpg
apg
be.mpg
- /Users/scnsma/work/tex/prese
bg@ -> /Users/scnsma/work/tex/
-> /Users/scnsma/work/tex/pres
og
r
og
r
tex/presentations/defense/
makeallwww~* pi
makeall~* pr
e/ matt/ pr
movie.mpg pr
oldfigs/ pr
omega.mpg pr
t/tex/presentations/defense/pr
dmdr.mpg@ m
dmdr_0.15.mpg@ m

tcsH

tcsH

tcsH

RiemshockXRoe.mpg

256/256 (514)

(1.5e+00, 1.2e+00)

1.00

Riem shock: X & Roe



00:00:08



-00:00:00

```
mpg
apg
be.mpg
- /Users/scnsma/work/tex/presen
pg@ -> /Users/scnsma/work/tex/
-> /Users/scnsma/work/tex/pres
pg
I
pg
I
tex/presentations/defense/
makeallwww~* pi
makeall~* pr
e/ matt/ pr
movie.mpg pr
oldfigs/ pr
omega.mpg pr
t/tex/presentations/defense/pr
dmdr.mpg@ m
dmdr_0.15.mpg@ m
```


10

100

1000

10000

100000

1000000

10000000

100000000

1000000000

10000000000

100000000000

1000000000000

10000000000000

tssh

tssh

tssh

RiemshockXRoe.mpg

256/256 (514)

(1.5e+00, 1.2e+00)

1.00

Riem shock: X & Roe



00:00:08

-00:00:00

```
mpg
apg
be.mpg
- /Users/scnsma/work/tex/prese
bg@ -> /Users/scnsma/work/tex/
-> /Users/scnsma/work/tex/pres

bg
r
bg
r
tex/presentations/defense/
    makeallwww~*      pi
    makeall~*         pr
    le/               pr
    movie.mpg         pr
    oldfigs/          pr
    omega.mpg         pr
t/tex/presentations/defense/pr

dmdr.mpg@
dmdr_0.15.mpg@
```


tcsh tcsh tcsh

```

-rw-r--r-- 1 scnsma 1901925513 3044362 Mar 26 15:51 RiempfanXRoe.mpg
-rw-r--r-- 1 scnsma 1901925513 1415310 Mar 26 15:51 RiempshockX.mpg
-rw-r--r-- 1 scnsma 1901925513 2040763 Mar 26 15:51 RiempshockXRoe.mpg
lrwxr-xr-x 1 scnsma 1901925513 62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/prese
lrwxr-xr-x 1 scnsma 1901925513 67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/
lrwxr-xr-x 1 scnsma 1901925513 54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r-- 1 scnsma 1901925513 196 Apr 14 08:54 mvoies
-rw-r--r-- 1 scnsma 1901925513 228 Apr 14 08:53 mvoies~
-rw-r--r-- 1 scnsma 1901925513 2849138 Mar 26 15:51 q_0.mpg
-rw-r--r-- 1 scnsma 1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r-- 1 scnsma 1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r-- 1 scnsma 1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/       fig_typeI/        makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/          fig_typeII/       makeall~*         pr
README         fig_0.27/        fig_sbd/          fig_vprofile/     matt/             pr
README~        fig_o/           fig_sbo/          img/              movie.mpg         pr
a.mpg          fig_pc/          fig_staticstar/   makeall*          oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/          makeallwww*       omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiempfanX.mpg      RiempshockX.mpg   dmdr.mpg@        m
PRiemi001XRoe.mpg RiempfanXRoe.mpg   RiempshockXRoe.mpg dmdr_0.15.mpg@   m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg     q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg     q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg

```

```

x      tcsh      x      tcsh      x      tcsh
-rw-r--r--  1 scnsma  1901925513  3044362 Mar  26 15:51 RiempfanXRoe.mpg
-rw-r--r--  1 scnsma  1901925513  1415310 Mar  26 15:51 RiemshockX.mpg
-rw-r--r--  1 scnsma  1901925513  2040763 Mar  26 15:51 RiemshockXRoe.mpg
lrwxr-xr-x  1 scnsma  1901925513      62 Apr  14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/prese
lrwxr-xr-x  1 scnsma  1901925513      67 Apr  14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/
lrwxr-xr-x  1 scnsma  1901925513      54 Apr  14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r--  1 scnsma  1901925513     196 Apr  14 08:54 mvoies
-rw-r--r--  1 scnsma  1901925513     228 Apr  14 08:53 mvoies~
-rw-r--r--  1 scnsma  1901925513  2849138 Mar  26 15:51 q_0.mpg
-rw-r--r--  1 scnsma  1901925513  2944127 Mar  26 15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3344373 Mar  26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar  26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/       fig_typeI/        makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/          fig_typeII/       makeall~*         pr
README          fig_0.27/        fig_sbd/          fig_vprofile/     matt/             pr
README~         fig_o/           fig_sbo/          img/              movie.mpg         pr
a.mpg           fig_pc/          fig_staticstar/   makeall*          oldfigs/          pr
bak/            fig_primvarsolver/ fig_tov/          makeallwww*       omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiempfanX.mpg      RiemshockX.mpg    dmdr.mpg@        m
PRiem1001XRoe.mpg RiempfanXRoe.mpg    RiemshockXRoe.mpg dmdr_0.15.mpg@   m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg  q_0q_c_0.mpg     q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg  q_0q_c_0.mpg     q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg

```



```

x      tcsh      x      tcsh      x      tcsh
-rw-r--r--  1 scnsma  1901925513  3044362 Mar  26 15:51 RiempfanXRoe.mpg
-rw-r--r--  1 scnsma  1901925513  1415310 Mar  26 15:51 RiemshockX.mpg
-rw-r--r--  1 scnsma  1901925513  2040763 Mar  26 15:51 RiemshockXRoe.mpg
lrwxr-xr-x  1 scnsma  1901925513      62 Apr  14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/prese
lrwxr-xr-x  1 scnsma  1901925513      67 Apr  14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/
lrwxr-xr-x  1 scnsma  1901925513      54 Apr  14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r--  1 scnsma  1901925513     196 Apr  14 08:54 mvoies
-rw-r--r--  1 scnsma  1901925513     228 Apr  14 08:53 mvoies~
-rw-r--r--  1 scnsma  1901925513  2849138 Mar  26 15:51 q_0.mpg
-rw-r--r--  1 scnsma  1901925513  2944127 Mar  26 15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3344373 Mar  26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar  26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/      fig_typeI/      makeallwww~*    pi
NearCrit.mpg    fig_0.197/        fig_sbc/         fig_typeII/     makeall~*       pr
README         fig_0.27/        fig_sbd/         fig_vprofile/   matt/           pr
README~        fig_o/           fig_sbo/         img/            movie.mpg       pr
a.mpg          fig_pc/          fig_staticstar/  makeall*        oldfigs/        pr
bak/           fig_primvarsolver/ fig_tov/         makeallwww*     omega.mpg       pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiempfanX.mpg      RiemshockX.mpg    dmdr.mpg@      m
PRiem1001XRoe.mpg RiempfanXRoe.mpg    RiemshockXRoe.mpg dmdr_0.15.mpg@ m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg          q_0q_2c_0.mpg  q_0q_c_0.mpg    q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg          q_0q_2c_0.mpg  q_0q_c_0.mpg    q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg

```

```

x      tcsh      x      tcsh      x      tcsh
-rw-r--r--  1 scnsma  1901925513  2040763 Mar  26 15:51 RiemshockXRoe.mpg
lrwxr-xr-x  1 scnsma  1901925513      62 Apr  14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/prese
lrwxr-xr-x  1 scnsma  1901925513      67 Apr  14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/
lrwxr-xr-x  1 scnsma  1901925513      54 Apr  14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r--  1 scnsma  1901925513     196 Apr  14 08:54 mvoies
-rw-r--r--  1 scnsma  1901925513     228 Apr  14 08:53 mvoies~
-rw-r--r--  1 scnsma  1901925513  2849138 Mar  26 15:51 q_0.mpg
-rw-r--r--  1 scnsma  1901925513  2944127 Mar  26 15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3344373 Mar  26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar  26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/    fig_sbc/      fig_typeII/      makeall~*      pr
README         fig_0.27/    fig_sbd/      fig_vprofile/    matt/      pr
README~        fig_o/      fig_sbo/      img/      movie.mpg      pr
a.mpg          fig_pc/      fig_staticstar/  makeall*      oldfigs/      pr
bak/          fig_primvarsolver/ fig_tov/      makeallwww*      omega.mpg      pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@      RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      m
PRiem1001XRoe.mpg  RiemfanXRoe.mpg  RiemshockXRoe.mpg  dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg

```


1/257

(1.5e+00 , 1.2e+00)

0.00

Riem fan: X & Roe

10

10

```
tex/presentations/defense/
```

```
makeallwww~*      pi
```

```
makeall~*      pr
```

matt/ pr

movie.mpg	pr
-----------	----

```
movie.mpg      pr
oldfigs/       pr
```

75611957
TDC 000000

contact@omega.lmpg

7/ tex/presentations/defense/pr

1. *Chlorophyll a* (Chl *a*)

dmdr.mpg@

dmdr 0.15.mpg@

ekX.mpg

ckXRoe.mpg

水

tcssh

tcssh

tcssh

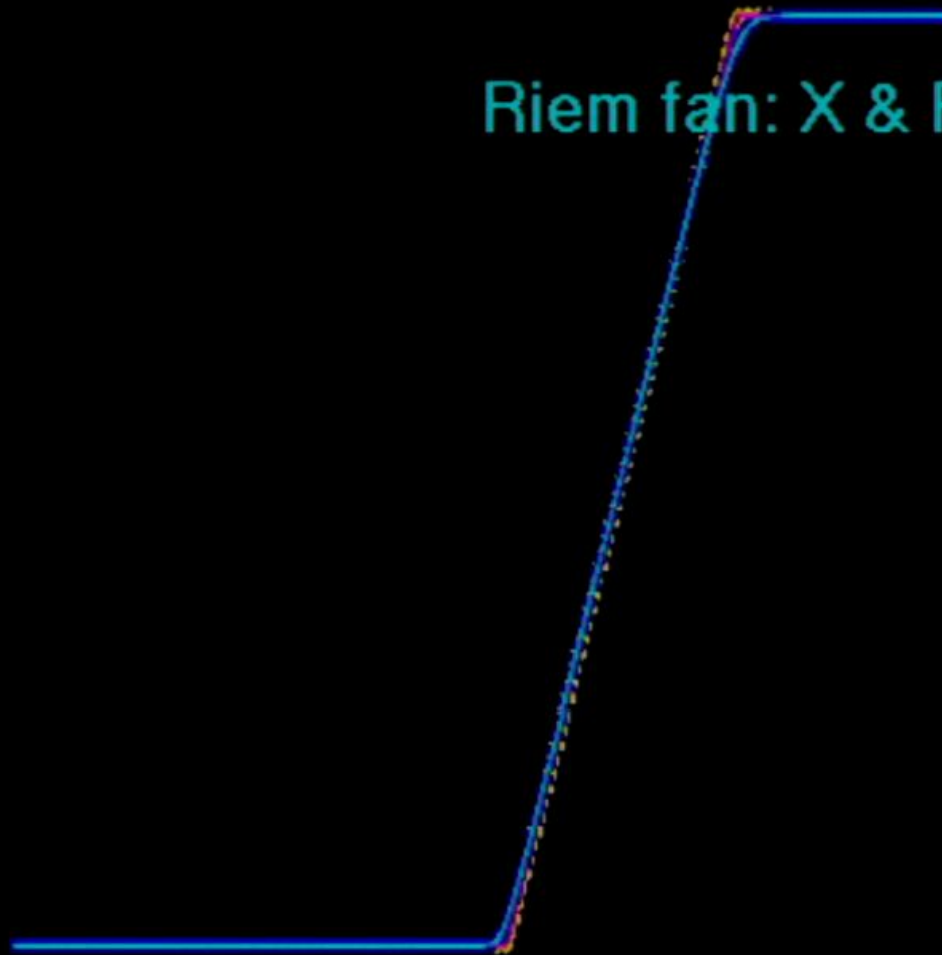
tcssh

72/257 (514)

(1.5e+00, 1.2e+00)

0.55

Riem fan: X & Roe



```
/Users/scnsma/work/tex/pres  
og@ -> /Users/scnsma/work/tex/  
-> /Users/scnsma/work/tex/pres
```

```
og  
T  
og  
tex/presentations/defense/  
makeallwww~* pi  
makeall~* pr  
le/ matt/ pr  
movie.mpg pr  
oldfigs/ pr  
omega.mpg pr  
t/tex/presentations/defense/pr
```

```
dmdr.mpg@  
dmdr_0.15.mpg@
```

```
ckX.mpg  
ckXRoe.mpg  
ck
```


tssh

tssh

tssh

RiemfanXRoe.mpg

119/257 (514)

(1.5e+00, 1.2e+00)

0.92

Riem fan: X & Roe



00:00:03



-00:00:04

```
/Users/scnsma/work/tex/pres  
og@ -> /Users/scnsma/work/tex/  
-> /Users/scnsma/work/tex/pres
```

```
og  
T  
og  
tex/presentations/defense/  
makeallwww~* pi  
makeall~* pr  
le/ matt/ pr  
movie.mpg pr  
oldfigs/ pr  
omega.mpg pr  
t/tex/presentations/defense/pr
```

```
dmdr.mpg@ m  
dmdr_0.15.mpg@ m
```

```
ckX.mpg  
ckXRoe.mpg  
ck
```

tcsb

tcs

tcsb

194/257 (514)

(1.5e+00 , 1.2e+00)

1.51

Riem fan: X & Roe

```
> /Users/scnsma/work/tex/pres  
og@ -> /Users/scnsma/work/tex/  
-> /Users/scnsma/work/tex/pres
```

0g
1
0g

```
lex/presentations/defense/
```

```
makeallwww~*      pi
```

```
makeall~*      pr
```

matt/ pr

```
movie.mpg      pr
```

```
oldfigs/      pr
```

omega.mpg pr

.../tex/presentations/defense/pr

1000

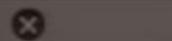
dmdr.mpg@

dmdr_0.15.mpg@

ckX.mpg

ckXRoe.mpg

ek



tssh



tssh



tssh



256/257 (514)

RiemfanXRoe.mpg

(1.5e+00, 1.2e+00)

1.99

Riem fan: X & Roe



00:00:08



-00:00:00

```
/Users/scnsma/work/tex/pres  
og@ -> /Users/scnsma/work/tex/  
-> /Users/scnsma/work/tex/pres
```

```
og  
T  
og  
T  
tex/presentations/defense/  
makeallwww~* pi  
makeall~* pr  
e/ matt/ pr  
movie.mpg pr  
oldfigs/ pr  
omega.mpg pr  
t/tex/presentations/defense/pr
```

```
dmdr.mpg@ m  
dmdr_0.15.mpg@ m
```

```
ckX.mpg  
ckXRoe.mpg  
ck
```

```

x      tssh      x      tssh      x      tssh
lrwxr-xr-x  1 scnsma  1901925513      62 Apr 14 08:54 dmdr.mpg@ -> /Users/scnsma/work/tex/prese
lrwxr-xr-x  1 scnsma  1901925513      67 Apr 14 08:54 dmdr_0.15.mpg@ -> /Users/scnsma/work/tex/
lrwxr-xr-x  1 scnsma  1901925513      54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r--  1 scnsma  1901925513      196 Apr 14 08:54 mvoies
-rw-r--r--  1 scnsma  1901925513      228 Apr 14 08:53 mvoies~
-rw-r--r--  1 scnsma  1901925513 2849138 Mar 26 15:51 q_0.mpg
-rw-r--r--  1 scnsma  1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma  1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/    fig_sbc/      fig_typeII/      makeall~*      pr
README         fig_0.27/    fig_sbd/      fig_vprofile/    matt/      pr
README~        fig_o/      fig_sbo/      img/      movie.mpg      pr
a.mpg          fig_pc/      fig_staticstar/  makeall*      oldfigs/      pr
bak/          fig_primvarsolver/ fig_tov/      makeallwww*      omega.mpg      pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@      RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      m
PRiem1001XRoe.mpg  RiemfanXRoe.mpg  RiemshockXRoe.mpg  dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock

```



```

x      tssh      x      tssh      x      tssh
lrwxr-xr-x  1 scnsma  1901925513      54 Apr 14 08:54 movie.mpg@ -> /Users/scnsma/work/tex/pres
-rw-r--r--  1 scnsma  1901925513      196 Apr 14 08:54 mvoies
-rw-r--r--  1 scnsma  1901925513      228 Apr 14 08:53 mvoies~
-rw-r--r--  1 scnsma  1901925513 2849138 Mar 26 15:51 q_0.mpg
-rw-r--r--  1 scnsma  1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma  1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/    fig_sbc/      fig_typeII/      makeall~*      pr
README         fig_0.27/    fig_sbd/      fig_vprofile/    matt/      pr
README~        fig_o/      fig_sbo/      img/      movie.mpg      pr
a.mpg          fig_pc/      fig_staticstar/  makeall*      oldfigs/      pr
bak/          fig_primvarsolver/ fig_tov/      makeallwww*      omega.mpg      pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@      RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      m
PRiem1001XRoe.mpg  RiemfanXRoe.mpg  RiemshockXRoe.mpg  dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg      RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg

```



tcs



tcs



tcs



q_0.mpg

1/257 (257)

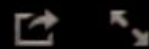
(1.5e+00, 1.2e+00)

0.00

q_0



00:00:00



-00:00:08

```
log
f
log
f
tex/presentations/defense/
    makeallwww~*    pi
    makeall~*      pr
    le/            pr
    movie.mpg      pr
    oldfigs/       pr
    omega.mpg      pr
    /tex/presentations/defense/pr
    dmdr.mpg@      m
    dmdr_0.15.mpg@ m
    ckX.mpg
    ckXRoe.mpg
    ck
    Roe.mpg
```




tcsch



tcsch



tcsch

q_0.mpg

63/257 (257)

(1.5e+00, 1.2e+00)

0.48

q_0



00:00:02



-00:00:06

```
og
r
og
r
tex/presentations/defense/
    makeallwww~*    pi
    makeall~*      pr
    matt/          pr
    movie.mpg      pr
    oldfigs/       pr
    omega.mpg      pr
tex/presentations/defense/pr
dmdr.mpg@
dmdr_0.15.mpg@
ckK.mpg
ckXRoe.mpg
ck
Roe.mpg
```

tcsh

tcsh

tcsh

tcsh

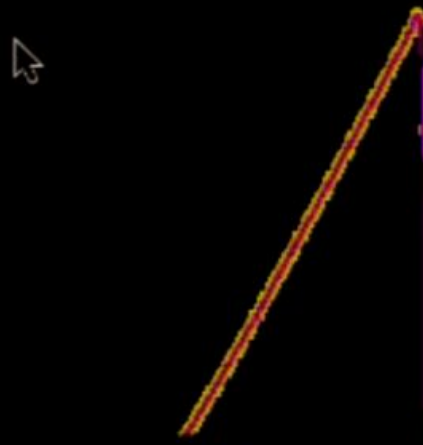
q_0.mpg

120/257 (257)

(1.5e+00, 1.2e+00)

0.93

q_0



00:00:03



-00:00:05

```
og
f
og
f
tex/presentations/defense/
    makeallwww~*    pi
    makeall~*       pr
e/    matt/         pr
    movie.mpg       pr
    oldfigs/        pr
    omega.mpg       pr
/tex/presentations/defense/pr
dmdr.mpg@
dmdr_0.15.mpg@
ckX.mpg
ckXRoe.mpg
ck
Roe.mpg
```




tcsh



tcsh



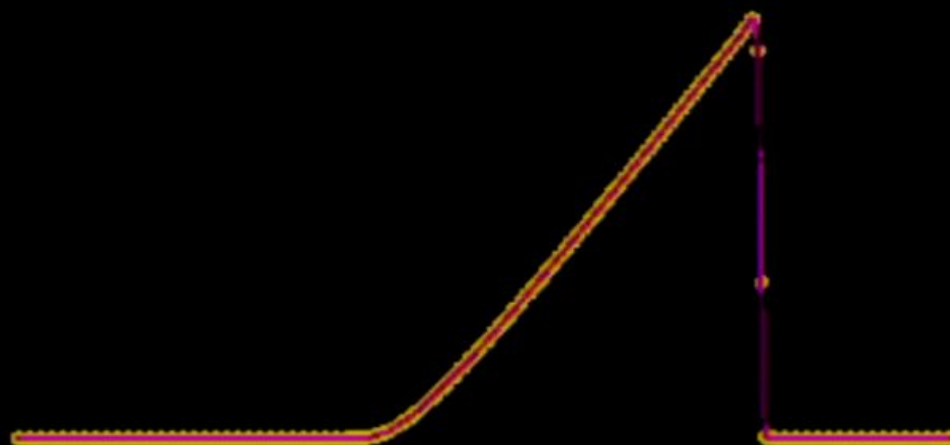
tcsh

188/257 (257)

(1.5e+00 , 1.2e+00)

1.46

q_0



```
og
f
og
f
tex/presentations/defense/
    makeallwww~*    pi
    makeall~*      pr
e/    matt/        pr
    movie.mpg      pr
    oldfigs/       pr
    omega.mpg      pr
k/tex/presentations/defense/pr
e
dmdr.mpg@
dmdr_0.15.mpg@
ckK.mpg
ckXRoe.mpg
ck
Roe.mpg
```

tcs

tcs

tcs

q_0.mpg

256/257 (257)

(1.5e+00 , 1.2e+00)

1.99

q_0



00 00:08

-00:00:00

```
og
T
og
T
tex/presentations/defense/
    makeallwww~*    pi
    makeall~*       pr
    e/              pr
    movie.mpg       pr
    oldfigs/        pr
    omega.mpg       pr
    /tex/presentations/defense/pr
    dmdr.mpg@
    dmdr_0.15.mpg@
    ckX.mpg
    ckXRoe.mpg
    ck
    Roe.mpg
```



```

x      tcsh      x      tcsh      x      tcsh
-rw-r--r--  1 scnsma  1901925513      196 Apr 14 08:54 mvoies
-rw-r--r--  1 scnsma  1901925513      228 Apr 14 08:53 mvoies~
-rw-r--r--  1 scnsma  1901925513 2849138 Mar 26 15:51 q_0.mpg
-rw-r--r--  1 scnsma  1901925513 2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma  1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/    fig_sbc/      fig_typeII/      makeall~*      pr
README         fig_0.27/    fig_sbd/      fig_vprofile/    matt/      pr
README~        fig_o/      fig_sbo/      img/      movie.mpg      pr
a.mpg          fig_pc/      fig_staticstar/  makeall*      oldfigs/      pr
bak/           fig_primvarsolver/ fig_tov/      makeallwww*      omega.mpg      pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@      RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      m
PRiem1001XRoe.mpg  RiemfanXRoe.mpg  RiemshockXRoe.mpg  dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:

```

```

x      tssh      x      tssh      x      tssh
-rw-r--r--  1 scnsma  1901925513  2849138 Mar 26 15:51 q_0.mpg
-rw-r--r--  1 scnsma  1901925513  2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg     fig_0.197/     fig_sbc/         fig_typeII/     makeall~*         pr
README          fig_0.27/     fig_sbd/         fig_vprofile/   matt/             pr
README~         fig_o/        fig_sbo/         img/            movie.mpg         pr
a.mpg           fig_pc/       fig_staticstar/  makeall*        oldfigs/          pr
bak/            fig_primvarsolver/ fig_tov/        makeallwww*     omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@    RiemfanX.mpg    RiemshockX.mpg    dmdr.mpg@      m
PRiem1001XRoe.mpg RiemfanXRoe.mpg RiemshockXRoe.mpg dmdr_0.15.mpg@ m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg          q_0q_2c_0.mpg  q_0q_c_0.mpg     q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg          q_0q_2c_0.mpg  q_0q_c_0.mpg     q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg

```



```

x      tcsh      x      tcsh      x      tcsh
-rw-r--r--  1 scnsma  1901925513  2849138 Mar 26 15:51 q_0.mpg
-rw-r--r--  1 scnsma  1901925513  2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/    fig_sbc/      fig_typeII/      makeall~*      pr
README         fig_0.27/    fig_sbd/      fig_vprofile/    matt/      pr
README~        fig_o/      fig_sbo/      img/      movie.mpg      pr
a.mpg          fig_pc/      fig_staticstar/  makeall*      oldfigs/      pr
bak/          fig_primvarsolver/ fig_tov/      makeallwww*      omega.mpg      pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@      RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@      m
PRiem1001XRoe.mpg  RiemfanXRoe.mpg  RiemshockXRoe.mpg  dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg

```

```

x      tssh      x      tssh      x      tssh
-rw-r--r--  1 scnsma  1901925513  2849138 Mar 26 15:51 q_0.mpg
-rw-r--r--  1 scnsma  1901925513  2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/      fig_pspace/      fig_typeI/      makeallwww~*      pi
NearCrit.mpg    fig_0.197/    fig_sbc/      fig_typeII/      makeall~*      pr
README         fig_0.27/    fig_sbd/      fig_vprofile/    matt/      pr
README~        fig_o/      fig_sbo/      img/      movie.mpg      pr
a.mpg          fig_pc/      fig_staticstar/  makeall*      oldfigs/      pr
bak/          fig_primvarsolver/ fig_tov/      makeallwww*      omega.mpg      pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@      RiempfanX.mpg      RiemshockX.mpg      dmdr.mpg@      m
PRiem1001XRoe.mpg      RiempfanXRoe.mpg      RiemshockXRoe.mpg      dmdr_0.15.mpg@      m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg      q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg      RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiempfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg

```


tcsb

tcs

tcsb

 q_0q_c_0.mpg

1/257 (514)

(1.5e+00 , 1.2e+00)

0.00

q_0 & q_c_0

```
tex/presentations/defense/
    makeallwww~*      pi
    makeall~*         pr
le/      matt/        pr
    movie.mpg         pr
    oldfigs/          pr
    omega.mpg          pr
k/tex/presentations/defense/pr
```

```
dmdr.mpg@
dmdr_0.15.mpg@
```

```
ckX.mpg
ckXRoe.mpg
ck
ckXRoe.mpg
```

00:00:00 ◆



-00:00:08

tcsh

tcsh

tcsh

tcsh

q_0q_c_0.mpg

35/257 (514)

(1.5e+00, 1.2e+00)

0.27

q_0 & q_c_0



00:00:01



-00:00:07

```
tex/presentations/defense/
makeallwww~*
makeall~*
le/ matt/
movie.mpg
oldfigs/
omega.mpg
/tex/presentations/defense/pr
dmdr.mpg@
dmdr_0.15.mpg@
ckX.mpg
ckXRoe.mpg
ck
XRoe.mpg
```


tcs

tcs

tcs

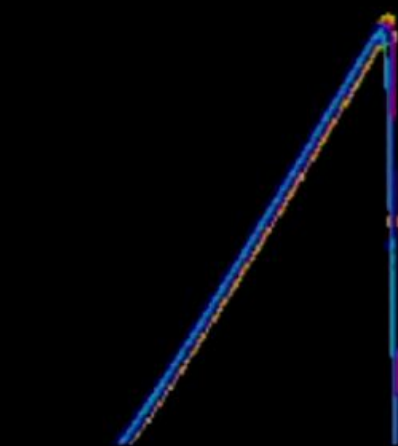
q_0q_c_0.mpg

136/257 (514)

(1.5e+00, 1.2e+00)

1.05

q_0 & q_c_0



00:00:04



-00:00:04

```
tex/presentations/defense/  
    makeallwww~*      pi  
    makeall~*         pr  
le/    matt/          pr  
    movie.mpg         pr  
    oldfigs/          pr  
    omega.mpg         pr  
/tex/presentations/defense/pr
```

```
dmdr.mpg@           m  
dmdr_0.15.mpg@      m
```

```
ckX.mpg  
ckXRoe.mpg  
ck  
XRoe.mpg
```



tcs



tcs



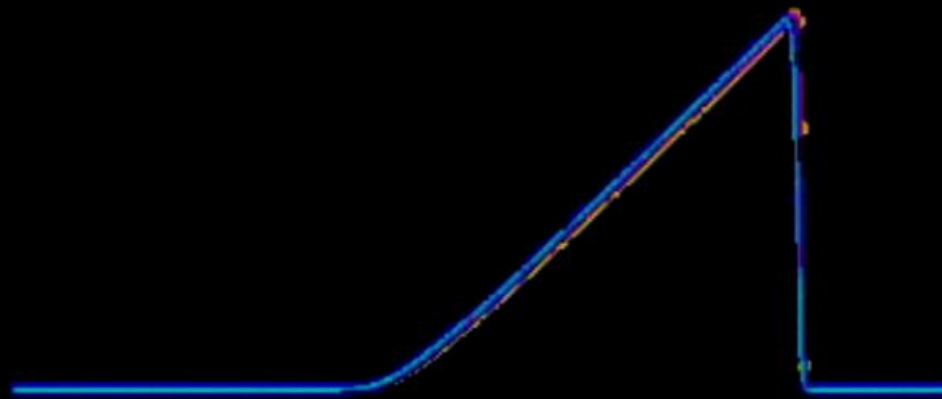
tcs

245/257 (514)

(1.5e+00 , 1.2e+00)

1.91

q_0 & q_{c_0}



```
tex/presentations/defense/
makeallwww~*
makeall~*
le/ matt/
movie.mpg
oldfigs/
omega.mpg
/tex/presentations/defense/pr
```

```
dmdr.mpg@
dmdr_0.15.mpg@
```

```
ckX.mpg
ckXRoe.mpg
ck
XRoe.mpg
```


tcs

tcs

tcs

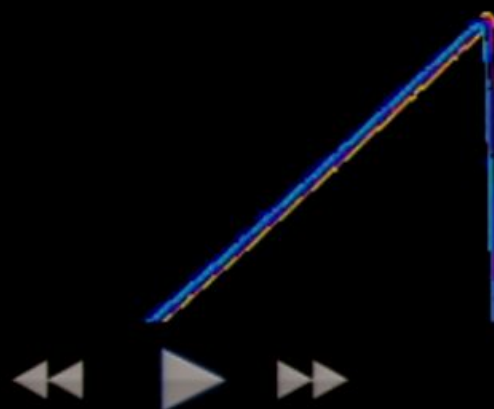
q_0q_c_0.mpg

256/257 (514)

(1.5e+00 , 1.2e+00)

1.99

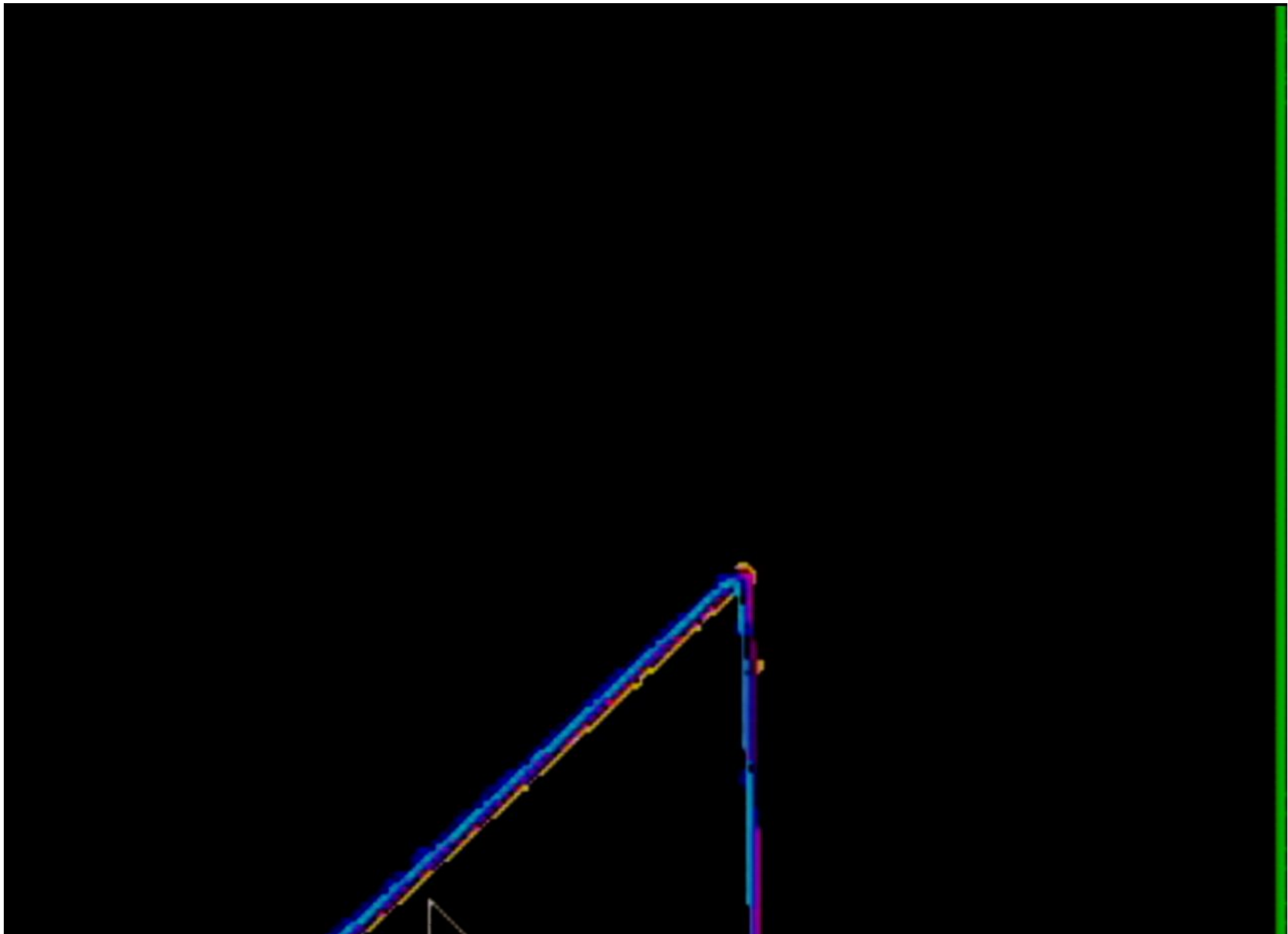
q_0 & q_c_0



00:00:08

-00:00:00

```
tex/presentations/defense/
makeallwww~*      pi
makeall~*         pr
le/               pr
movie.mpg         pr
oldfigs/          pr
omega.mpg         pr
tex/presentations/defense/pr
dmdr.mpg@
dmdr_0.15.mpg@
ckX.mpg
ckXRoe.mpg
ck
XRoe.mpg
```



tcs

tcs

tcs

q_0q_c_0.mpg

257/257 (514)

(1.5e+00, 1.2e+00)

2.00

q_0 & q_c_0



00:00:08

-00:00:00

```
tex/presentations/defense/
makeallwww~*
makeall~*
le/ matt/
movie.mpg
oldfigs/
omega.mpg
c/tex/presentations/defense/pr
```

```
dmdr.mpg@
dmdr_0.15.mpg@
```

```
ckX.mpg
ckXRoe.mpg
ck
XRoe.mpg
```

```

x      tcsh      x      tcsh      x      tcsh
-rw-r--r--  1 scnsma  1901925513  2944127 Mar 26 15:51 q_0q_2c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pr
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pr
README~        fig_o/           fig_sbo/           img/               movie.mpg         pr
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@        m
PRiem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg  dmdr_0.15.mpg@   m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0

```


tcsh

tcsh

tcsh

q_0q_nc_0.mpg

1/257 (514)

(1.5e+00, 1.2e+00)

0.00

q_0 & q_nc_0



00:00:00



-00:00:08

```
tex/presentations/defense/
    makeallwww~*
    makeall~*
le/    matt/
    movie.mpg
    oldfigs/
    omega.mpg
c/tex/presentations/defense/pr
```

```
dmdr.mpg@
dmdr_0.15.mpg@
```

```
ckX.mpg
ckXRoe.mpg
ck
XRoe.mpg
```

tssh

tssh

tssh

q_0q_nc_0.mpg

22/257 (514)

(1.5e+00, 1.2e+00)

0.16

q_0 & q_nc_0



00:00:00



-00:00:08

```
tex/presentations/defense/
    makeallwww~*      pi
    makeall~*         pr
le/    matt/          pr
    movie.mpg         pr
    oldfigs/          pr
    omega.mpg         pr
c/tex/presentations/defense/pr
```

```
dmdr.mpg@
dmdr_0.15.mpg@
```

```
ckX.mpg
ckXRoe.mpg
ck
XRoe.mpg
```


tssh

tssh

tssh

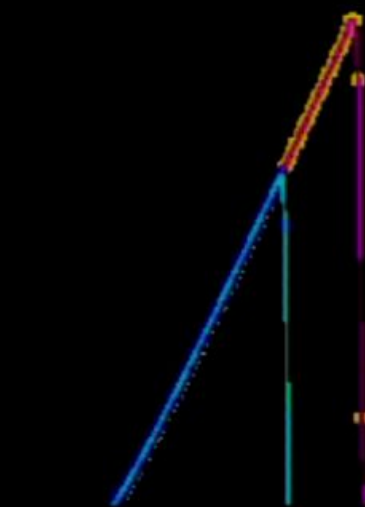
q_0q_nc_0.mpg

104/257 (514)

(1.5e+00, 1.2e+00)

0.80

q_0 & q_nc_0



00:00:03



-00:00:05

```
tex/presentations/defense/
    makeallwww~*
    makeall~*
    matt/
    movie.mpg
    oldfigs/
    omega.mpg
tex/presentations/defense/pr
```

```
dmdr.mpg@
dmdr_0.15.mpg@
```

```
ckX.mpg
ckXRoe.mpg
ck
XRoe.mpg
```

q_0q_nc_0.mpg

164/257 (514)

(1.5e+00, 1.2e+00)

1.27

q_0 & q_nc_0



00:00:05



-00:00:03

```
tex/presentations/defense/  
    makeallwww~*      pi  
    makeall~*         pr  
le/    matt/          pr  
    movie.mpg         pr  
    oldfigs/          pr  
    omega.mpg         pr  
/tex/presentations/defense/pr
```

```
dmdr.mpg@           m  
dmdr_0.15.mpg@      m
```

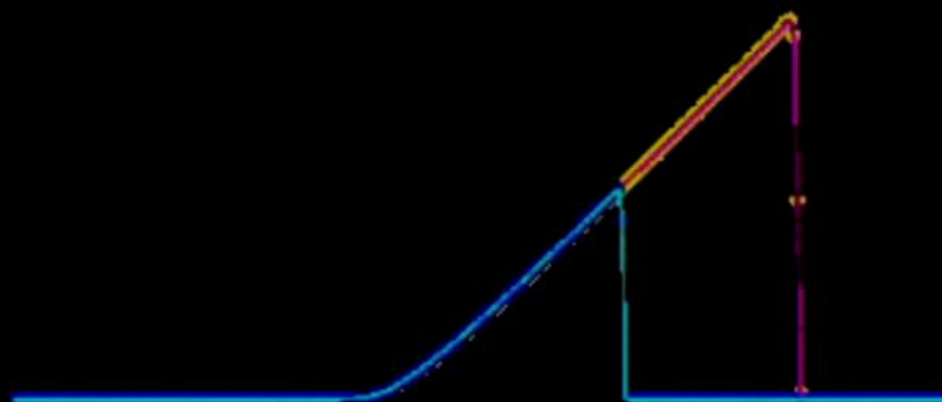
```
ckX.mpg  
ckXRoe.mpg  
ck  
XRoe.mpg
```


238/257 (514)

(1.5e+00 , 1.2e+00)

1.86

q_0 & q_{nc_0}



```
tex/presentations/defense/
makeallwww~*
makeall~*
le/ matt/
movie.mpg
oldfigs/
omega.mpg
c/tex/presentations/defense/pr
```

```
dmdr.mpg@
dmdr_0.15.mpg@
```

```
ckX.mpg
ckXRoe.mpg
ck
XRoe.mpg
```

tssh

tssh

tssh

q_0q_nc_0.mpg

256/257 (514)

(1.5e+00, 1.2e+00)

1.99

q_0 & q_nc_0



00:00:08

-00:00:00

```
tex/presentations/defense/
    makeallwww~*      pi
    makeall~*         pr
le/    matt/          pr
    movie.mpg         pr
    oldfigs/          pr
    omega.mpg         pr
c/tex/presentations/defense/pr
```

```
dmdr.mpg@
dmdr_0.15.mpg@
```

```
ckX.mpg
ckXRoe.mpg
ck
XRoe.mpg
```




tcsh



tcsh



tcsh



q_0q_nc_0.mpg

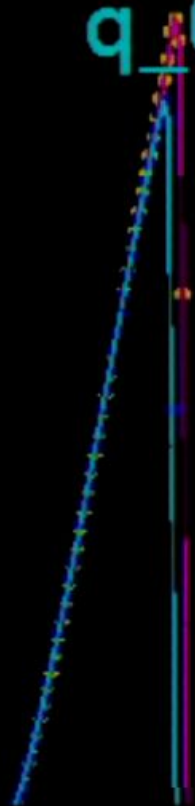
og

33/257 (514)

(1.5e+00, 1.2e+00)

0.25

q_0 & q_nc_0



00:00:01

-00:00:07

tssh

tssh

tssh

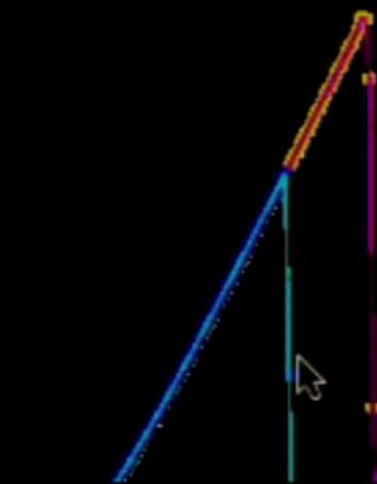
q_0q_nc_0.mpg

114/257 (514)

(1.5e+00, 1.2e+00)

0.88

q_0 & q_nc_0



00 00:03



-00:00:05

```
tex/presentations/defense/
    makeallwww~*      pi
    makeall~*         pr
    le/               pr
    movie.mpg         pr
    oldfigs/          pr
    omega.mpg         pr
    /tex/presentations/defense/pr
```

```
dmr.mpg@
dmr_0.15.mpg@
```

```
ckX.mpg
ckXRoe.mpg
ck
XRoe.mpg
```




tcs



tcs



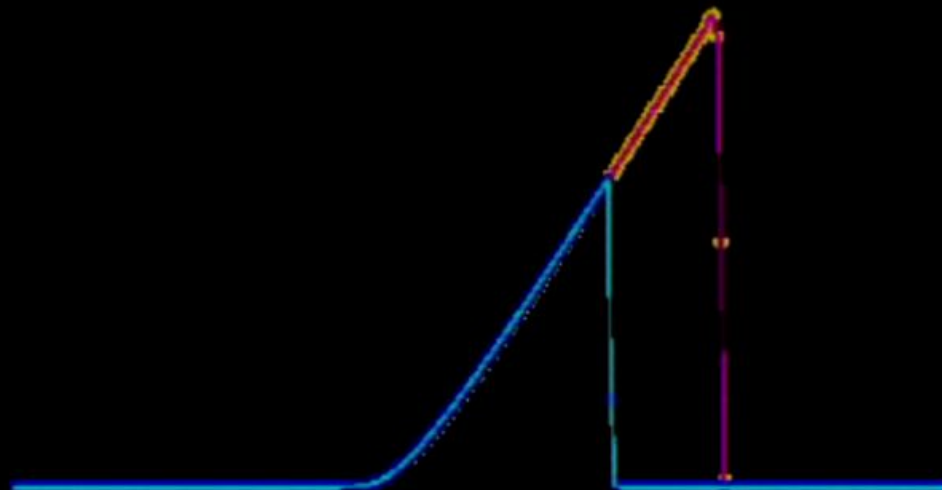
tcs

147/257 (514)

(1.5e+00 , 1.2e+00)

1.15

q_0 & q_{nc_0}



```
tex/presentations/defense/
makeallwww~*
makeall~*
le/ matt/
movie.mpg
oldfigs/
omega.mpg
c/tex/presentations/defense/pr
```

```
dmdr.mpg@
dmdr_0.15.mpg@
```

```
ckX.mpg
ckXRoe.mpg
ck
XRoe.mpg
```

tcsch

tcsch

tcsch

```

-rw-r--r--  1 scnsma  1901925513  3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pr
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pr
README~        fig_o/           fig_sbo/           img/               movie.mpg         pr
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@        m
PRiem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg dmdr_0.15.mpg@   m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg

```


tcsch

tcsch

tcsch

```

-rw-r--r--  1 scnsma  1901925513  3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pr
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pr
README~        fig_o/           fig_sbo/           img/               movie.mpg         pr
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@        m
PRiem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg dmdr_0.15.mpg@   m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg

```



```

x      tcsh      x      tcsh      x      tcsh
-rw-r--r--  1 scnsma  1901925513  3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/          fig_typeI/          makeallwww~*      pi
NearCrit.mpg     fig_0.197/         fig_sbc/             fig_typeII/         makeall~*         pr
README          fig_0.27/         fig_sbd/             fig_vprofile/       matt/             pr
README~         fig_o/            fig_sbo/             img/                movie.mpg         pr
a.mpg           fig_pc/           fig_staticstar/      makeall*            oldfigs/          pr
bak/            fig_primvarsolver/ fig_tov/             makeallwww*        omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@    RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        m
PRiem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg   dmdr_0.15.mpg@   m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg

```

tssh

tssh

tssh

```

-rw-r--r--  1 scnsma  1901925513  3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pr
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pr
README~        fig_o/           fig_sbo/           img/               movie.mpg         pr
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@       m
PRiem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg

```


tssh

tssh

tssh

```

-rw-r--r--  1 scnsma  1901925513  3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pr
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pr
README~        fig_o/           fig_sbo/           img/               movie.mpg         pr
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@        m
PRiem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg  dmdr_0.15.mpg@   m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg

```


tssh

tssh

tssh

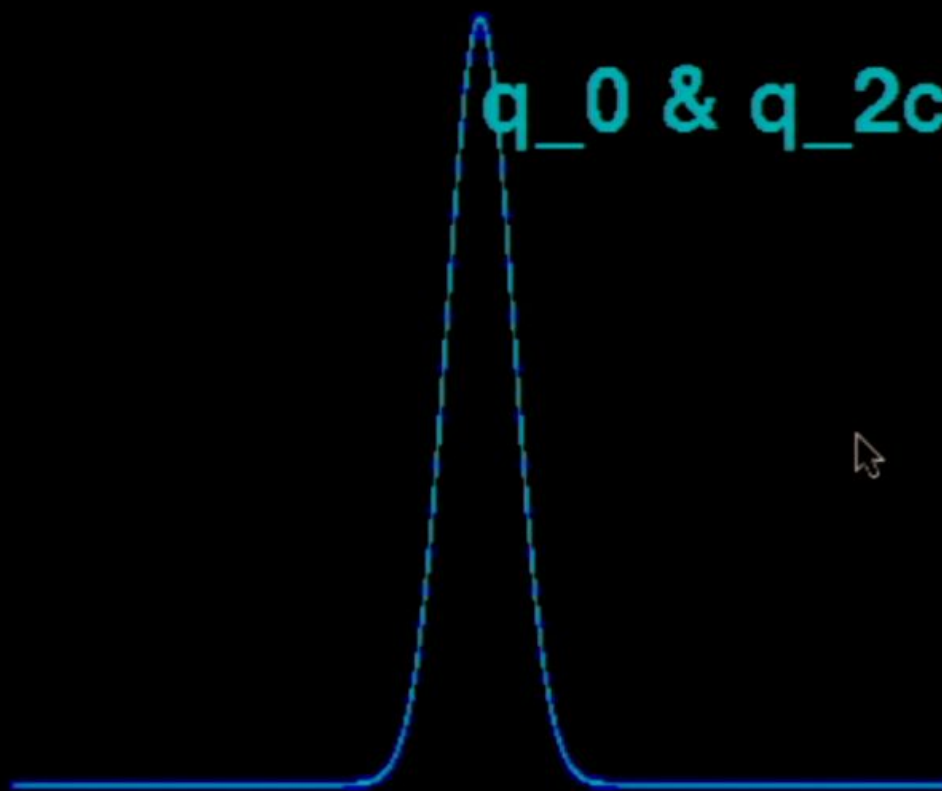
q_0q_2c_0.mpg

1/257 (514)

(1.5e+00, 1.3e+00)

0.00

q_0 & q_2c_0



```
tex/presentations/defense/
    makeallwww~*      pi
    makeall~*         pr
le/    matt/          pr
    movie.mpg         pr
    oldfigs/          pr
    omega.mpg         pr
t/tex/presentations/defense/pr
```

```
dmdr.mpg@
dmdr_0.15.mpg@
```

```
ckX.mpg
ckXRoe.mpg
ck
XRoe.mpg
```

00:00:00

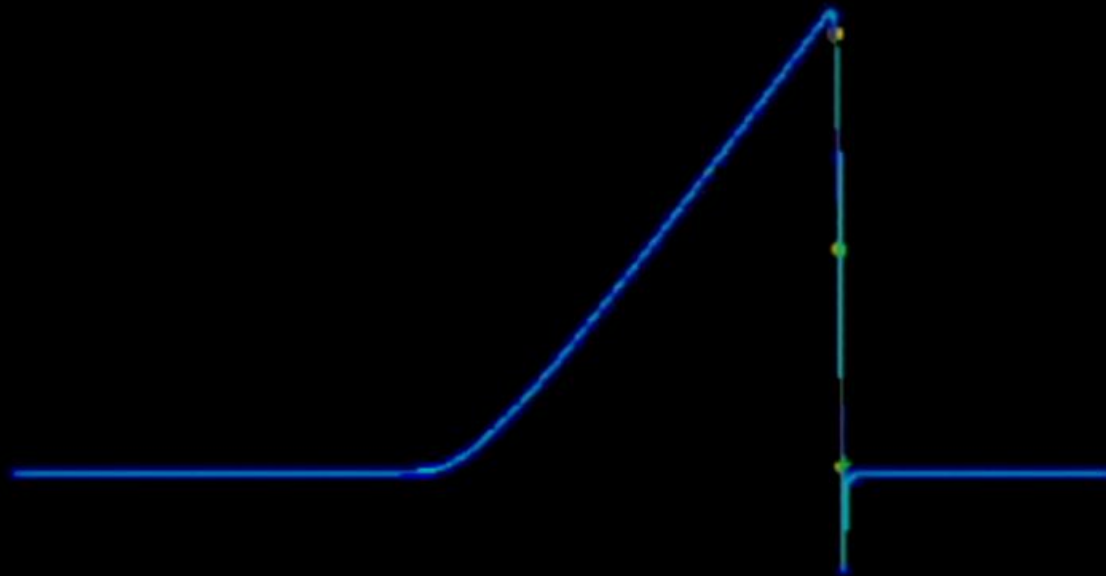
-00:00:08

143/257 (514)

(1.5e+00 , 1.3e+00)

1.11

q_0 & q_{2c_0}



tssh

tssh

tssh

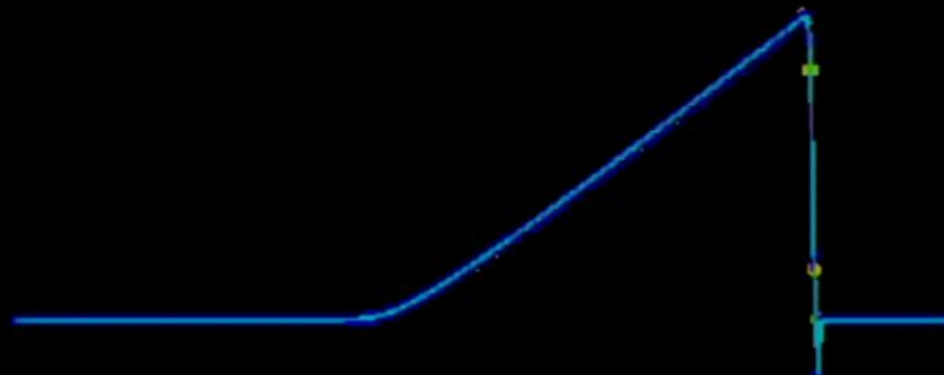
q_0q_2c_0.mpg

256/257 (514)

(1.5e+00, 1.3e+00)

1.99

q_0 & q_2c_0



00:00:08

-00:00:00

```
tex/presentations/defense/
    makeallwww~*      pi
    makeall~*         pr
le/    matt/          pr
    movie.mpg         pr
    oldfigs/          pr
    omega.mpg         pr
t/tex/presentations/defense/pr
```

```
dmdr.mpg@
dmdr_0.15.mpg@
```

```
ckX.mpg
ckXRoe.mpg
ck
XRoe.mpg
```

0.mpg

tssh

tssh

tssh

```

-rw-r--r--  1 scnsma 1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pr
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pr
README~        fig_o/           fig_sbo/           img/               movie.mpg         pr
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@    RiempfanX.mpg      RiemshockX.mpg      dmdr.mpg@        m
PRiem1001XRoe.mpg RiempfanXRoe.mpg   RiemshockXRoe.mpg   dmdr_0.15.mpg@   m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiempfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0q_c_0.mpg

```


tssh

tssh

tssh

```

-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pr
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pr
README~        fig_o/           fig_sbo/           img/               movie.mpg         pr
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@       m
PRiem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0q_c_0.mpg

```


tssh

tssh

tssh

```

-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pr
README          fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pr
README~         fig_o/           fig_sbo/           img/               movie.mpg         pr
a.mpg           fig_pc/          fig_staticstar/    makeall*           oldfigs/          pr
bak/            fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@       m
PRiem1001XRoe.mpg RiemfanXRoe.mpg  RiemshockXRoe.mpg dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg          q_0q_2c_0.mpg  q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg          q_0q_2c_0.mpg  q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg          q_0q_2c_0.mpg  q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0q_c_0.mpg

```

tssh

tssh

tssh

```

-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/       fig_typeI/        makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/          fig_typeII/       makeall~*         pr
README         fig_0.27/        fig_sbd/          fig_vprofile/     matt/             pr
README~        fig_o/           fig_sbo/          img/              movie.mpg         pr
a.mpg          fig_pc/          fig_staticstar/   makeall*          oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/          makeallwww*       omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg    dmdr.mpg@       m
PRiem1001XRoe.mpg RiemfanXRoe.mpg  RiemshockXRoe.mpg dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg   q_0q_c_0.mpg     q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg   q_0q_c_0.mpg     q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg         q_0q_2c_0.mpg   q_0q_c_0.mpg     q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0q_c_0.mpg

```


tssh

tssh

tssh

```

-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pr
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pr
README~        fig_o/           fig_sbo/           img/               movie.mpg         pr
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@       m
PRiem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0q_c_0.mpg

```


tssh

tssh

tssh

```

-rw-r--r--  1 scnsma 1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/       fig_typeI/        makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/          fig_typeII/       makeall~*         pr
README          fig_0.27/        fig_sbd/          fig_vprofile/     matt/             pr
README~         fig_o/           fig_sbo/          img/              movie.mpg         pr
a.mpg           fig_pc/          fig_staticstar/   makeall*          oldfigs/          pr
bak/            fig_primvarsolver/ fig_tov/          makeallwww*       omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg    dmdr.mpg@       m
PRiem1001XRoe.mpg RiemfanXRoe.mpg  RiemshockXRoe.mpg dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg     q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg     q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg     q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0q_c_0.mpg

```

tcsn

tcsn

tcsn

```

-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/       fig_typeI/        makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/          fig_typeII/       makeall~*         pr
README         fig_0.27/        fig_sbd/          fig_vprofile/     matt/             pr
README~        fig_o/           fig_sbo/          img/              movie.mpg         pr
a.mpg          fig_pc/          fig_staticstar/   makeall*          oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/          makeallwww*       omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiernfanX.mpg      RiernshockX.mpg    dmdr.mpg@       m
PRiern1001XRoe.mpg RiernfanXRoe.mpg   RiernshockXRoe.mpg dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiernshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiernshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riernshock
RiernshockX.mpg RiernshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiernfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0q_c_0.mpg

```


tssh

tssh

tssh

```

-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pr
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pr
README~        fig_o/           fig_sbo/           img/               movie.mpg         pr
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@       m
PRiem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0q_c_0.mpg

```

tssh

tssh

tssh

```

-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pr
README          fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pr
README~        fig_o/           fig_sbo/           img/               movie.mpg         pr
a.mpg           fig_pc/          fig_staticstar/    makeall*           oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/          makeallwww*        omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@    RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@        m
PRiem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg dmdr_0.15.mpg@   m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0q_c_0.mpg

```


tssh

tssh

tssh

```

-rw-r--r-- 1 scnsma 1901925513 3344373 Mar 26 15:51 q_0q_c_0.mpg
-rw-r--r-- 1 scnsma 1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pi
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pr
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pr
README~        fig_o/           fig_sbo/           img/               movie.mpg         pr
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pr
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@        m
PRiem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg dmdr_0.15.mpg@   m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg

```

tssh

tssh

tssh

```
-rw-r--r-- 1 scnsma 1901925513 3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/       fig_typeI/        makeallwww~*     pi
NearCrit.mpg    fig_0.197/        fig_sbc/          fig_typeII/       makeall~*        pr
README         fig_0.27/         fig_sbd/          fig_vprofile/     matt/            pr
README~        fig_o/            fig_sbo/          img/              movie.mpg        pr
a.mpg          fig_pc/           fig_staticstar/   makeall*          oldfigs/         pr
bak/           fig_primvarsolver/ fig_tov/          makeallwww*       omega.mpg        pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pr
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiempfanX.mpg      RiemshockX.mpg     dmdr.mpg@       m
PRiem1001XRoe.mpg RiempfanXRoe.mpg   RiemshockXRoe.mpg dmdr_0.15.mpg@  m
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiempfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0q_c_0.mpg
```



```
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pre
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pre
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg  dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```

```

-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         prea
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             prea
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg   dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0

```



```
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         prea
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             prea
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiempfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiempfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg     q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg     q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiempfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```

```

-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pree
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pree
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0

```



```
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pre
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pre
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```



```
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         prea
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             prea
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiempfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiempfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg     q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg     q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiempfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```



```
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pre
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pre
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg  dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```

```

-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         prea
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             prea
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0

```



```

-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         prea
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             prea
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg   dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0

```



```
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pres
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pres
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```



```
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         prea
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pres
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```

```
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         prea
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             prea
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```



```
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pree
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pree
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg     RiemshockX.mpg     dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg  RiemshockXRoe.mpg  dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg   q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg   q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```

```
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         prea
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             prea
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg          q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg          q_0q_2c_0.mpg  q_0q_c_0.mpg  q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg    RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```



```
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pres
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pres
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```

```
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         prea
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             prea
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg  dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```



```
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         prea
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             prea
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```

```
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*       pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*          prea
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/              prea
README~        fig_o/           fig_sbo/           img/               movie.mpg          pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/           pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg          pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```



```
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pres
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pres
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@    RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@         mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@    mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg          q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg    RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```

```
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         prea
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pres
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```



```
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         prea
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             prea
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg       q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```

```

-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pree
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pree
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0

```



```
-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         prea
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             prea
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg  dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```

```
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pre
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pre
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg     dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg   RiemshockXRoe.mpg  dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg   RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0
```



```

-rw-r--r--  1 scnsma  1901925513  3255932 Mar 26 15:51 q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open dmdr.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open ~/work/tex/presentations/defense/
MOVIE_LIST      fig_0.15/          fig_pspace/        fig_typeI/         makeallwww~*      pix/
NearCrit.mpg    fig_0.197/        fig_sbc/           fig_typeII/        makeall~*         pres
README         fig_0.27/        fig_sbd/           fig_vprofile/      matt/             pres
README~        fig_o/           fig_sbo/           img/               movie.mpg         pres
a.mpg          fig_pc/          fig_staticstar/    makeall*           oldfigs/          pres
bak/           fig_primvarsolver/ fig_tov/           makeallwww*        omega.mpg         pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: ln -s ~/work/tex/presentations/defense/pres
mathscnmacbook : info/perimeter-psi-april-2011/movies: open pres.pdf
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls
NearCrit.mpg@   RiemfanX.mpg      RiemshockX.mpg      dmdr.mpg@        mov
PRIem1001XRoe.mpg RiemfanXRoe.mpg    RiemshockXRoe.mpg    dmdr_0.15.mpg@   mvc
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q0*
ls: No match.
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: ls q_0*
q_0.mpg         q_0q_2c_0.mpg    q_0q_c_0.mpg      q_0q_nc_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockX.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open Riemshock
RiemshockX.mpg  RiemshockXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open RiemfanXRoe.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies:
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0.mpg
mathscnmacbook : info/perimeter-psi-april-2011/movies: open q_0

```