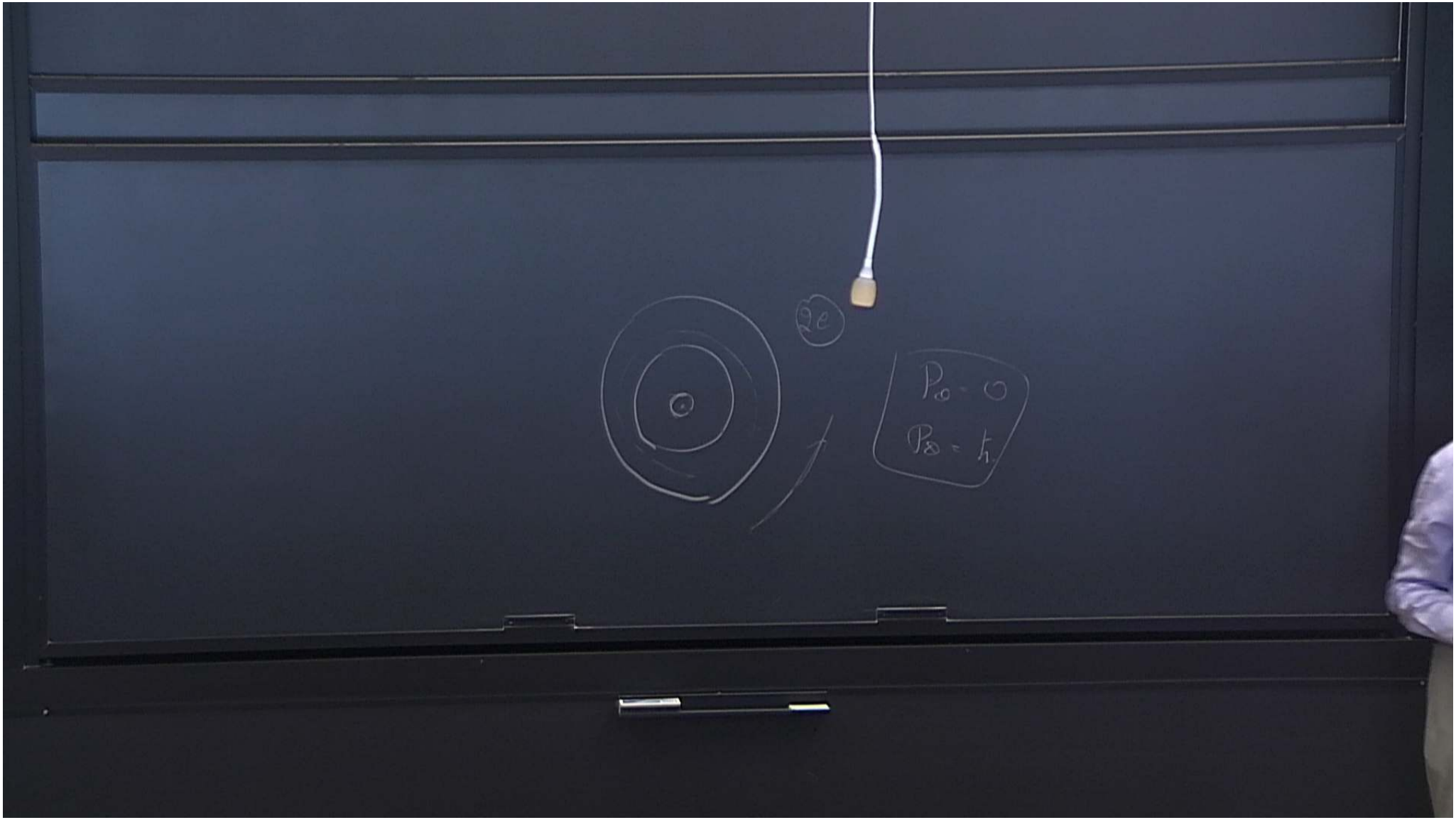
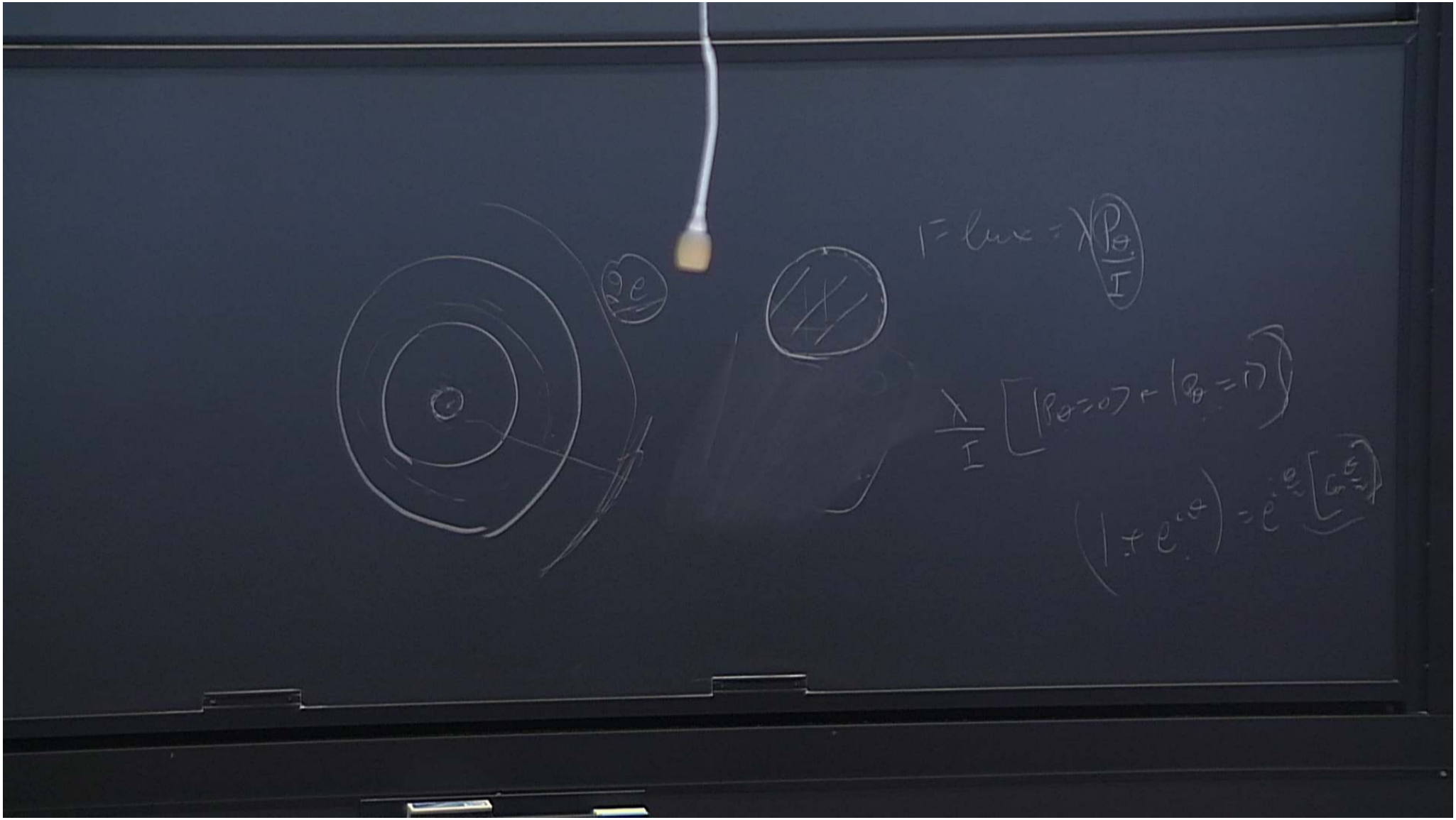
Title: TBA

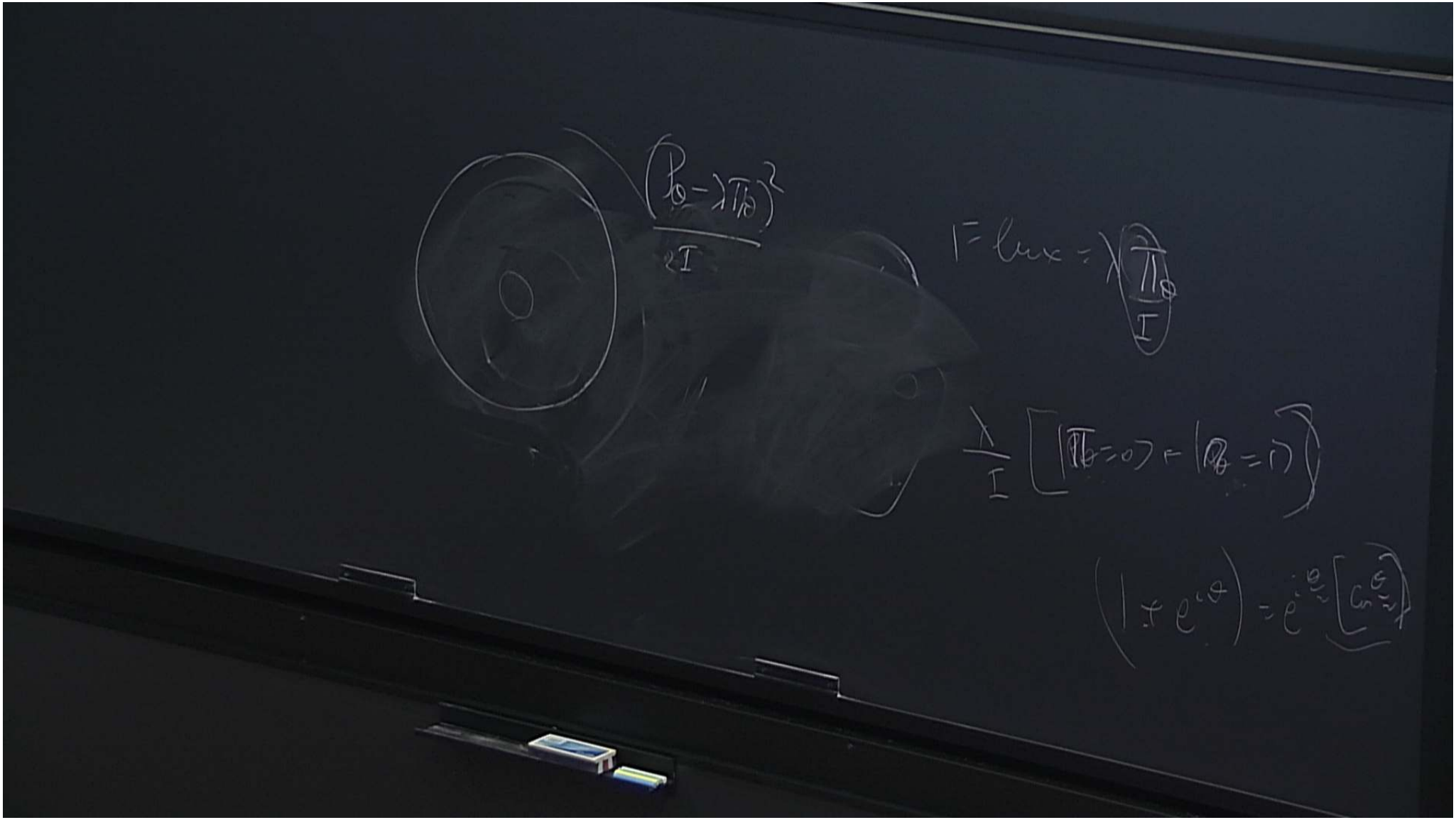
Date: Jun 14, 2016 09:30 AM

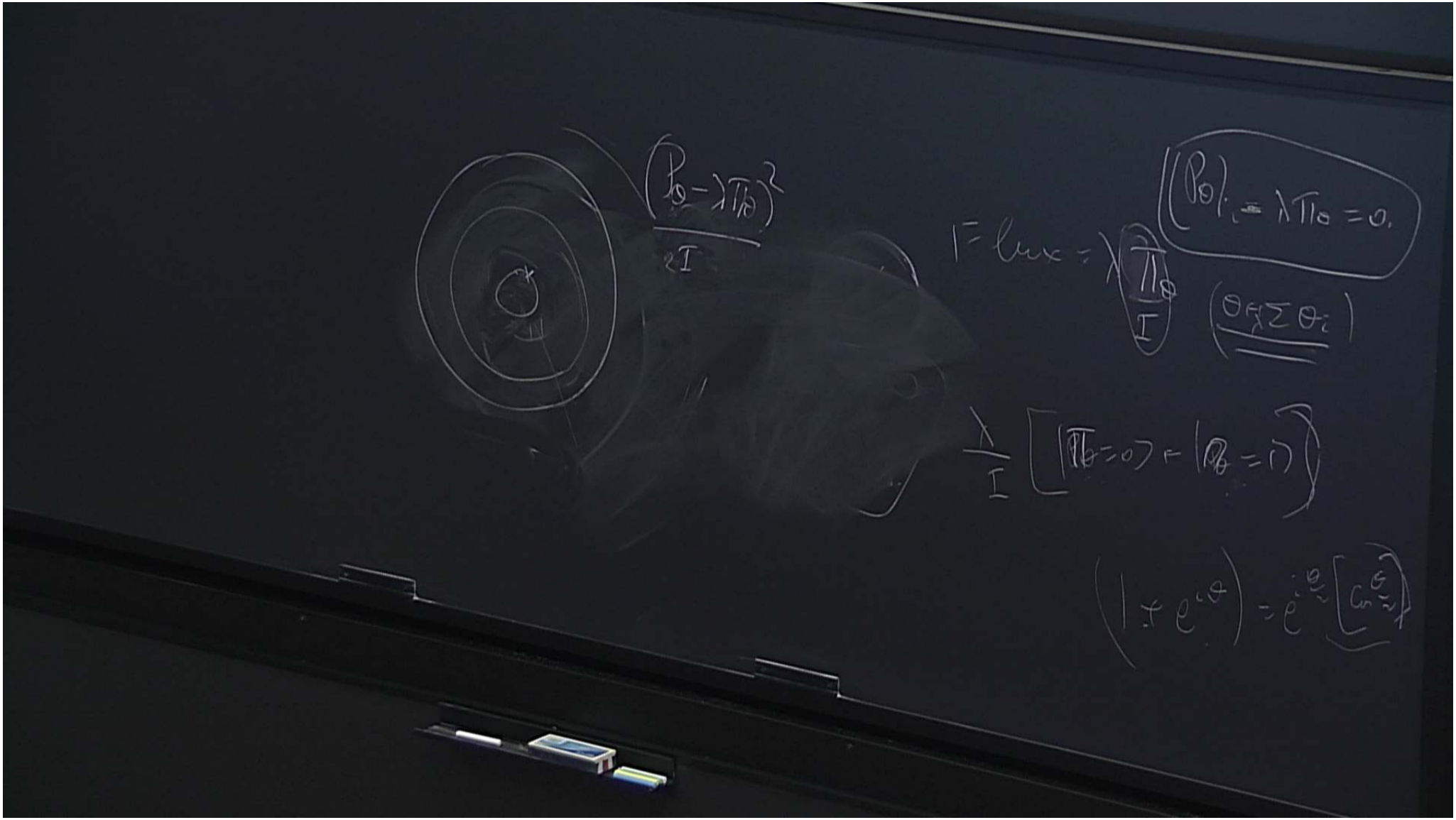
URL: http://pirsa.org/16060085

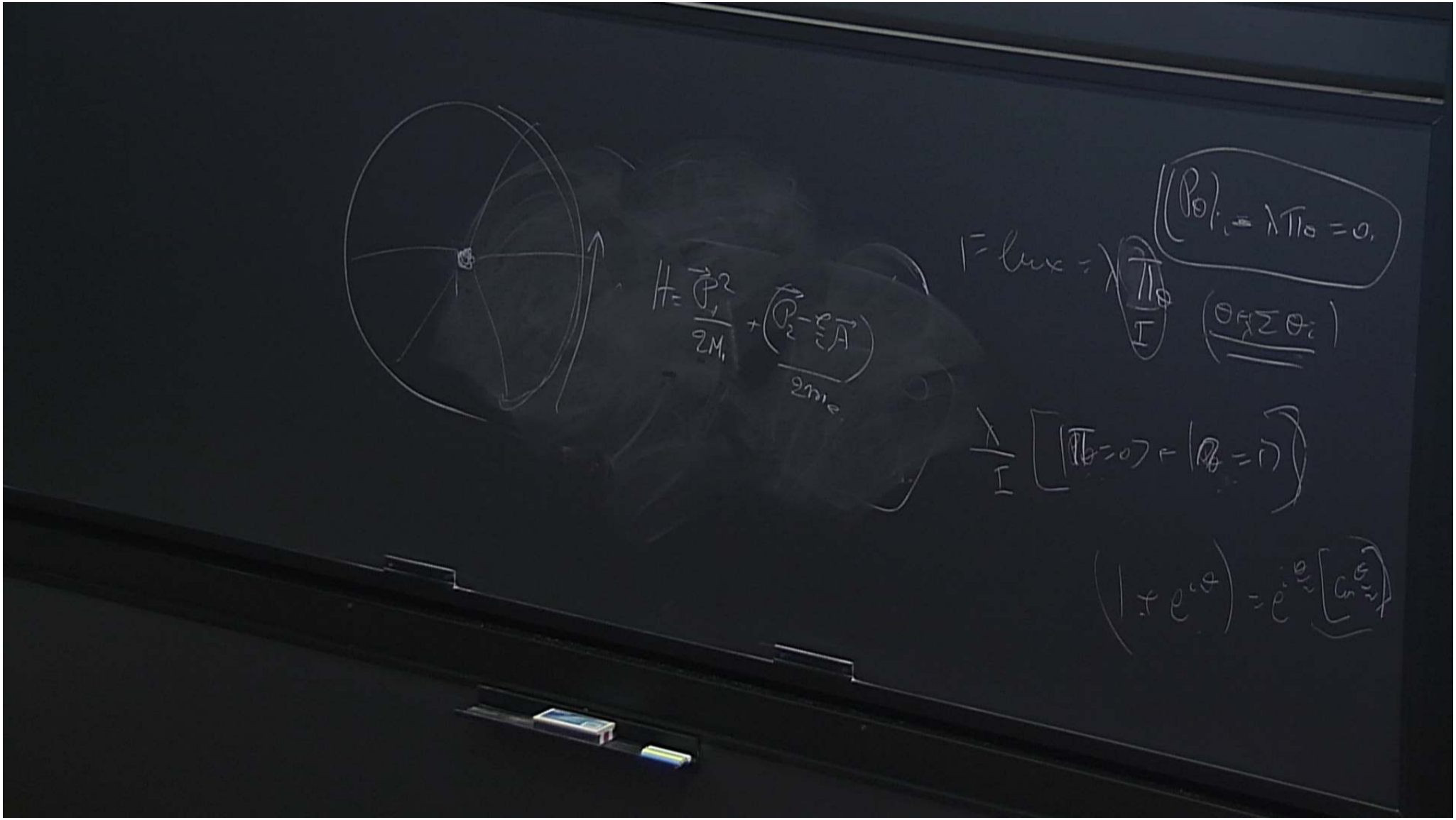
Abstract:

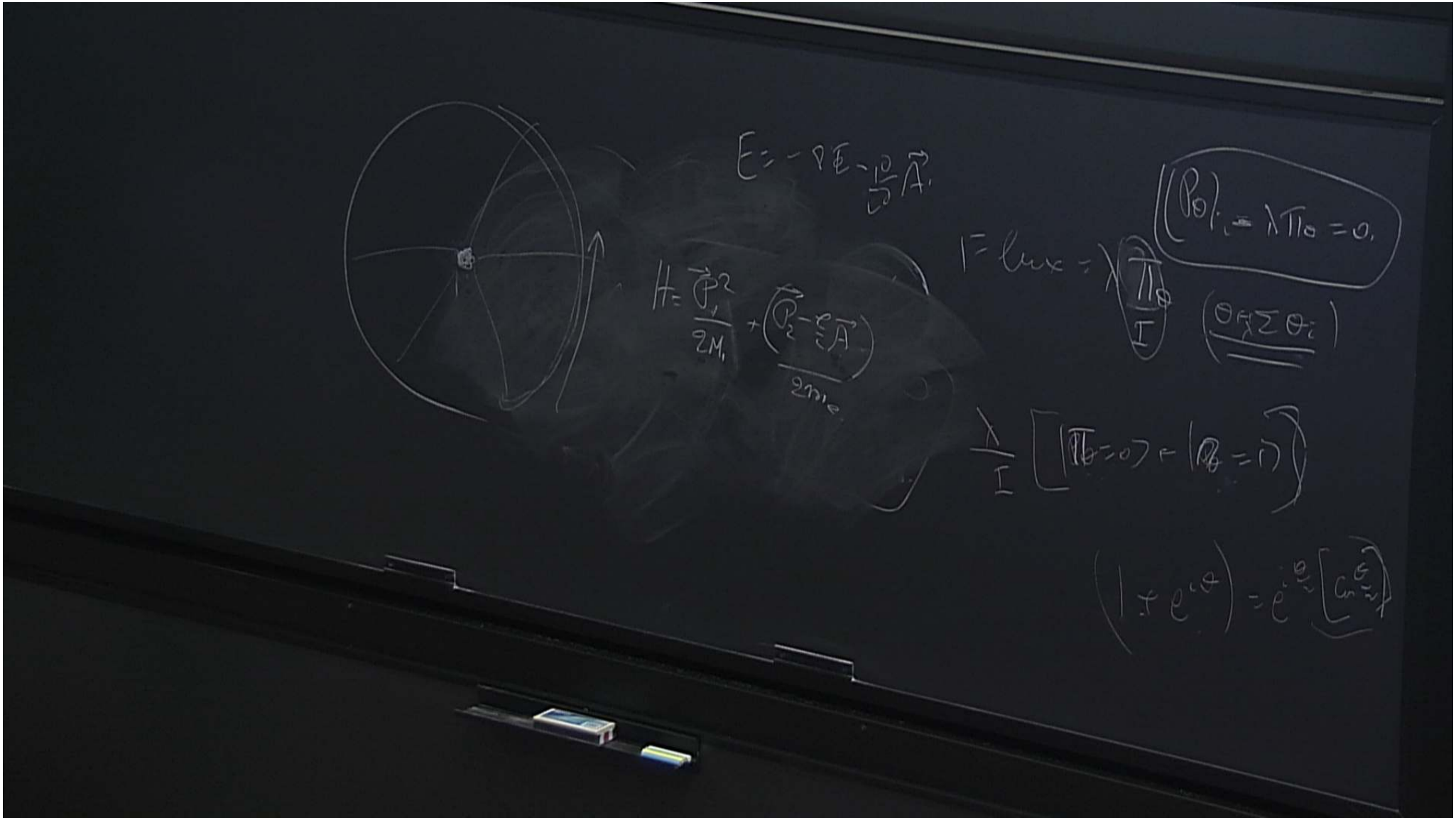

Re
$P_0 = 0$
$P_\infty = P_1$

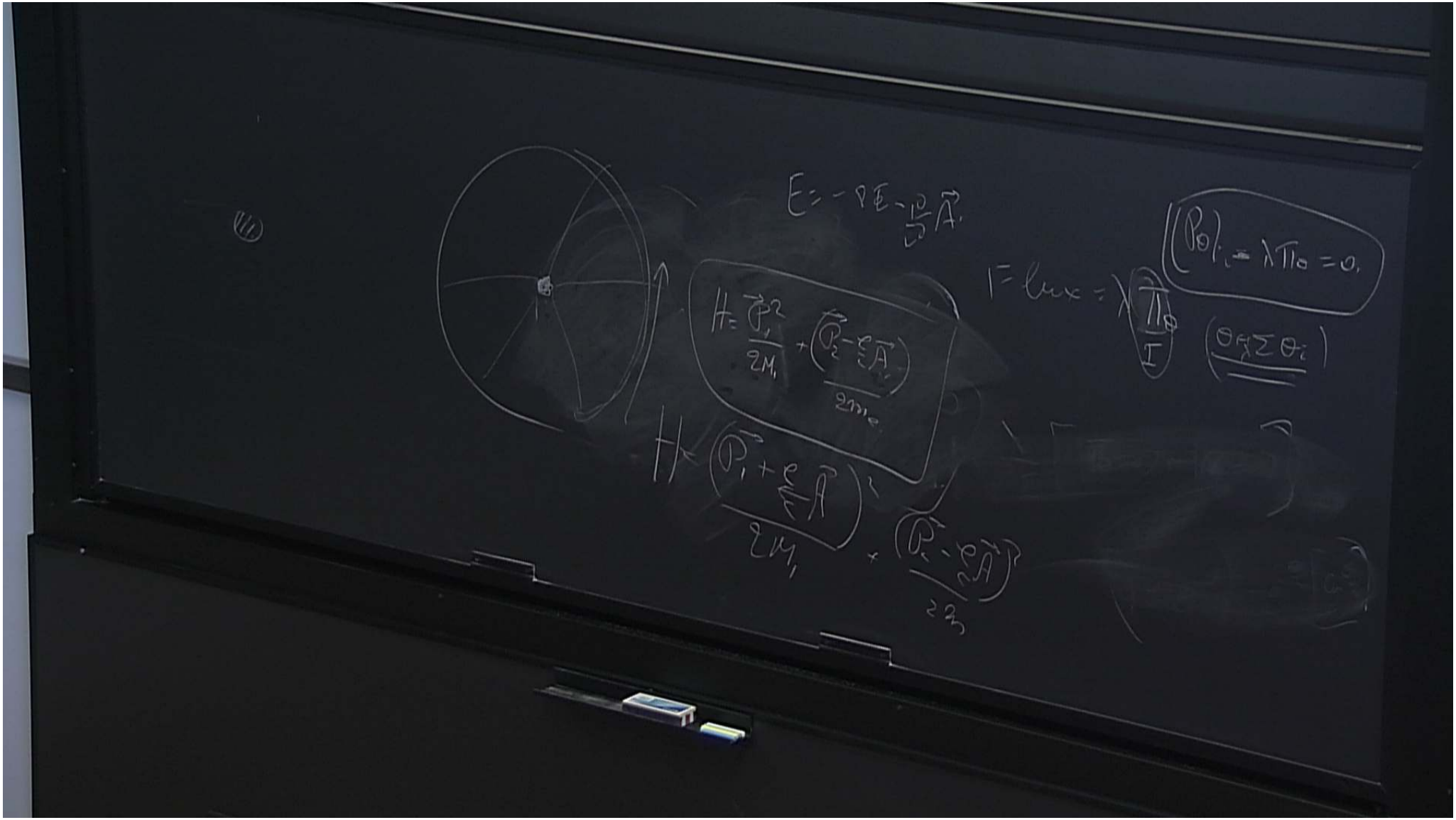


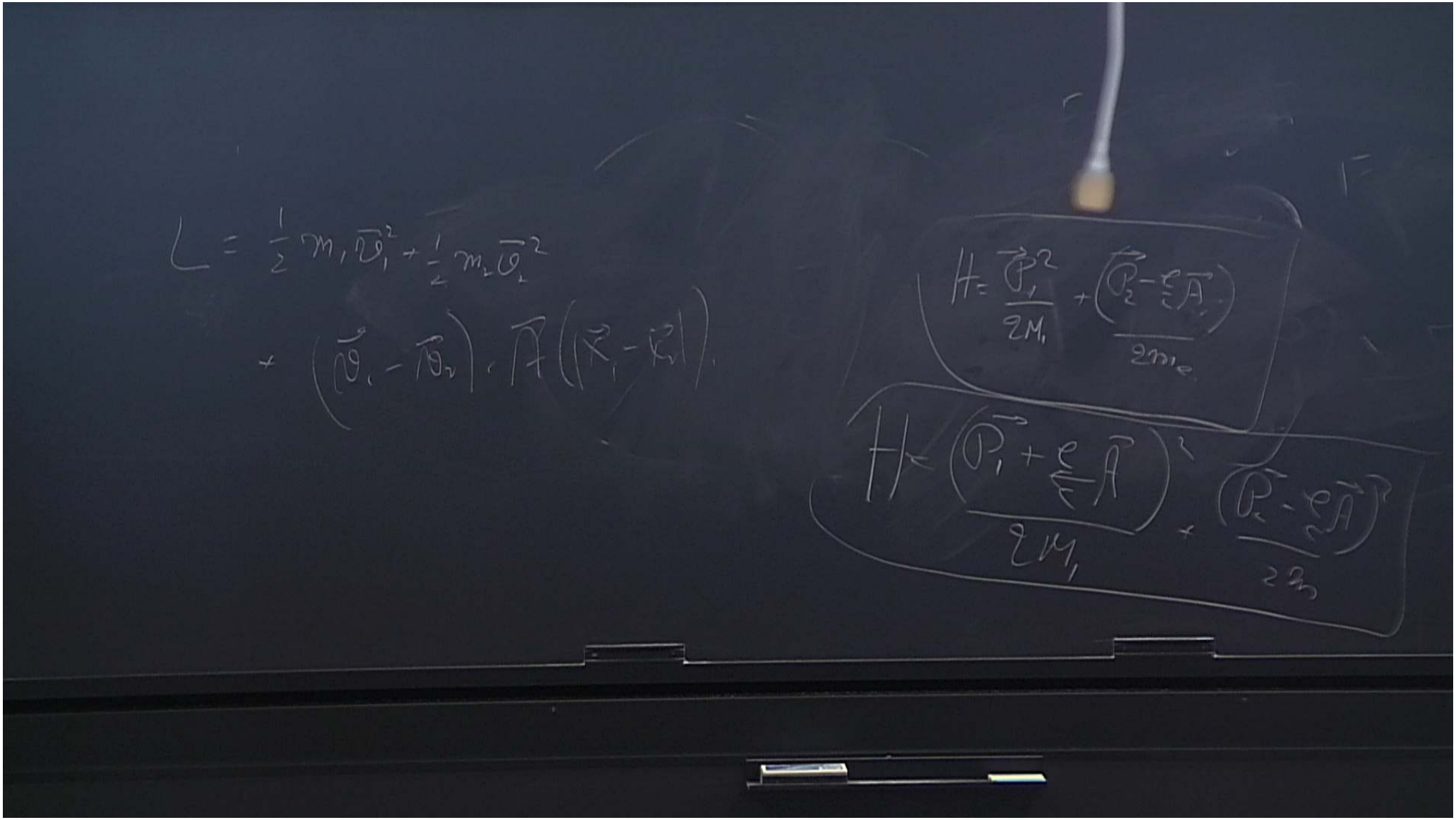

$\frac{(P_0 - \lambda\Pi_0)^2}{2I}$
$I = \text{flux} = \lambda\left(\frac{\Pi_0}{I}\right)$
$\frac{\lambda}{I}\left[\Pi_0 = 0\right] - \left[\Pi_0 = 1\right]$
$\left(1 + e^{i\theta}\right) = e^{i\frac{\theta}{2}}\left[\cos\frac{\theta}{2}\right]$

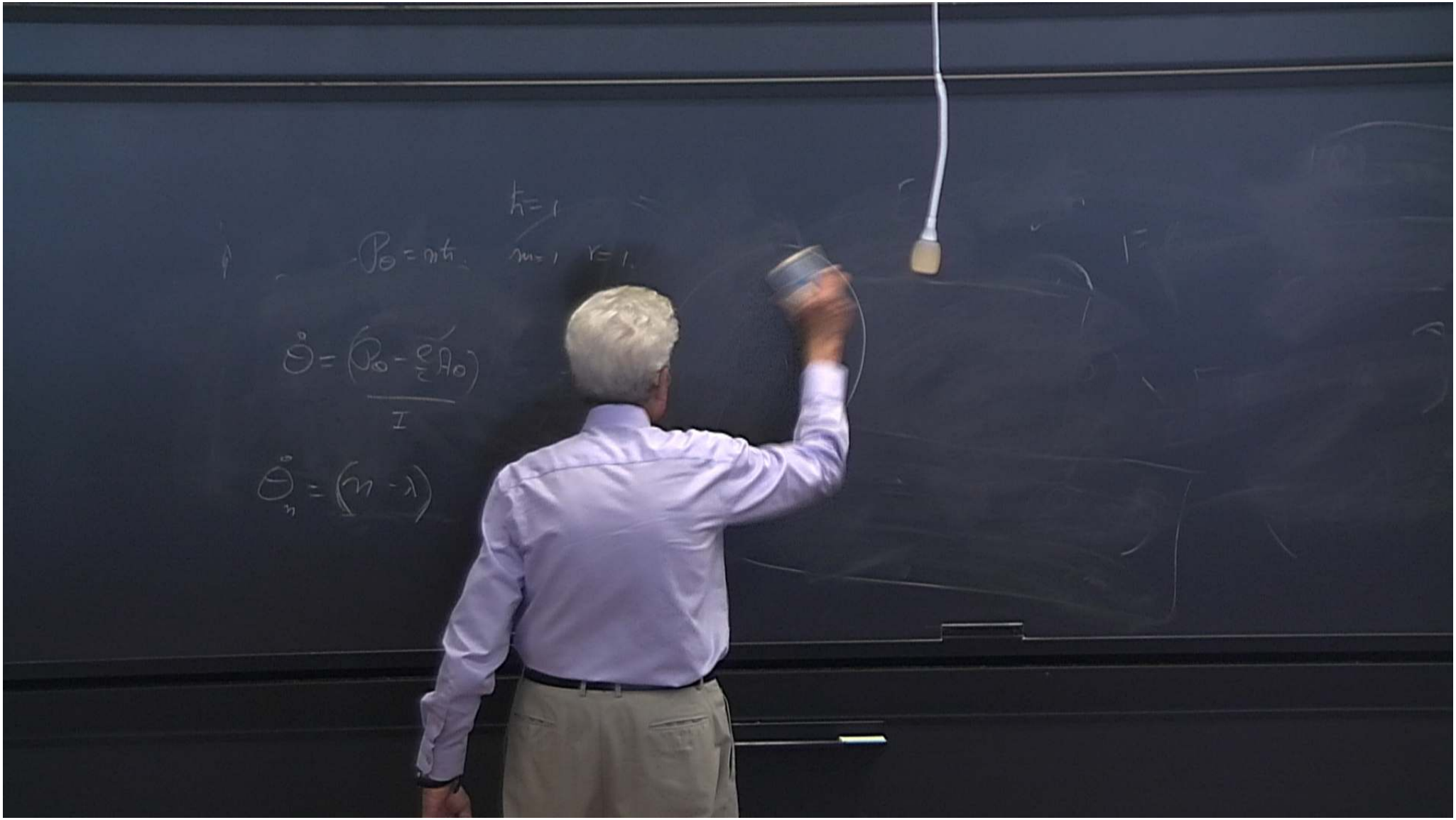

$\frac{(p_0 - \lambda\pi_0)^2}{2I}$
$\Gamma = \text{flux} = \lambda\left(\frac{\pi_0}{I}\right)$
$(p_0)_i - \lambda\pi_0 = 0$
$\left(\theta = \sum \theta_i\right)$
$\frac{\lambda}{I}\left[(\pi_0 = 0) \leftarrow (p_0 = 1)\right]$
$(1 + e^{i\theta}) = e^{i\frac{\theta}{2}}\left[\cos\frac{\theta}{2}\right]$

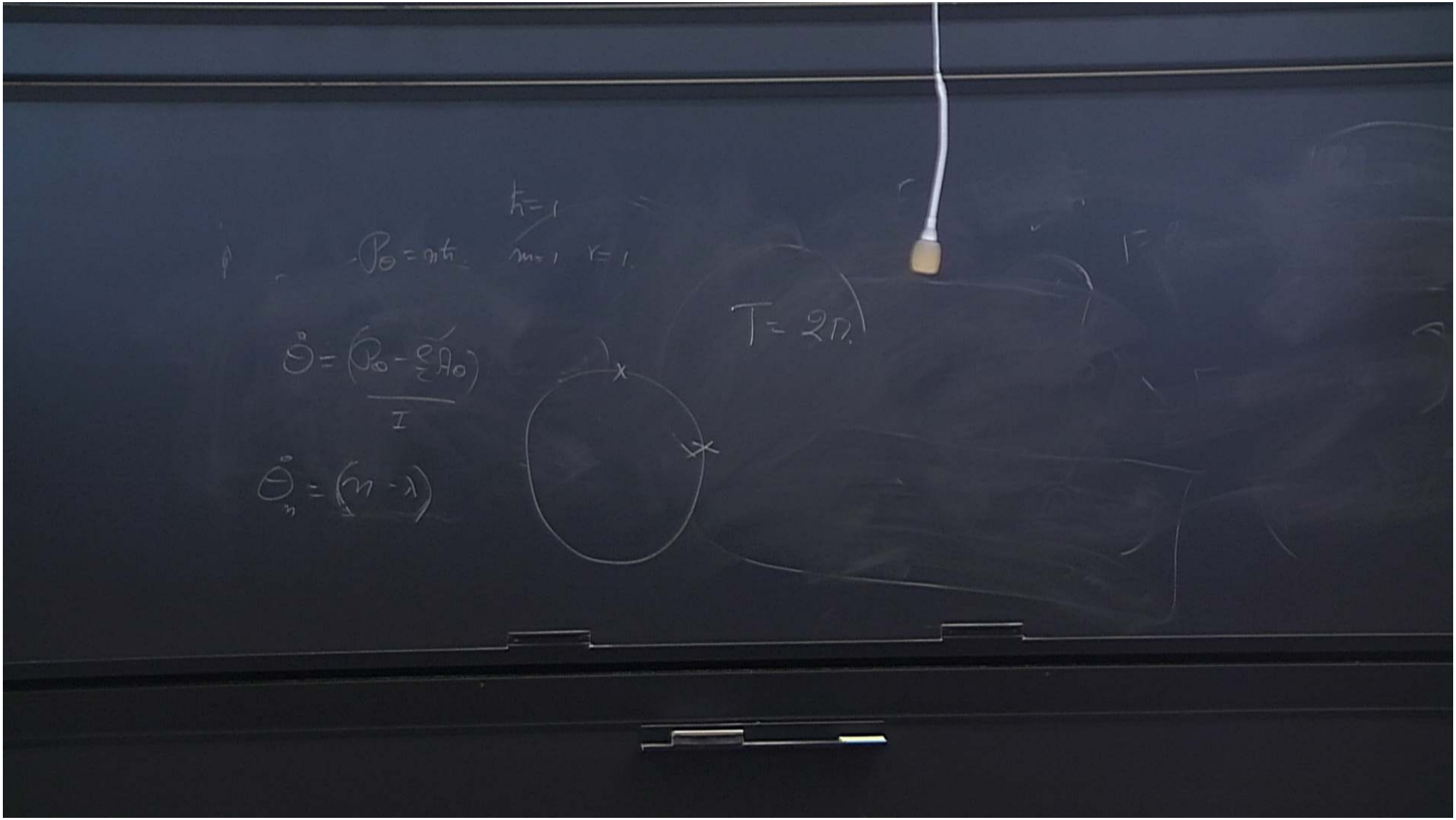

$H = \frac{\vec{P}_1^2}{2M_1} + \frac{(\vec{P}_2 - \xi\vec{A})}{2m_e}$
$\Gamma = \text{flux} = \frac{\Pi_\theta}{I}$
$(P_\theta)_i = \lambda \Pi_\theta = 0,$
$(\theta_{CM} = \Sigma \theta_i)$
$\frac{\lambda}{I}\left[(\Pi_\theta = 0) - (\theta = 1)\right]$
$(1 + e^{i\theta}) = e^{i\frac{\theta}{2}}\left[\cos\frac{\theta}{2}\right]$

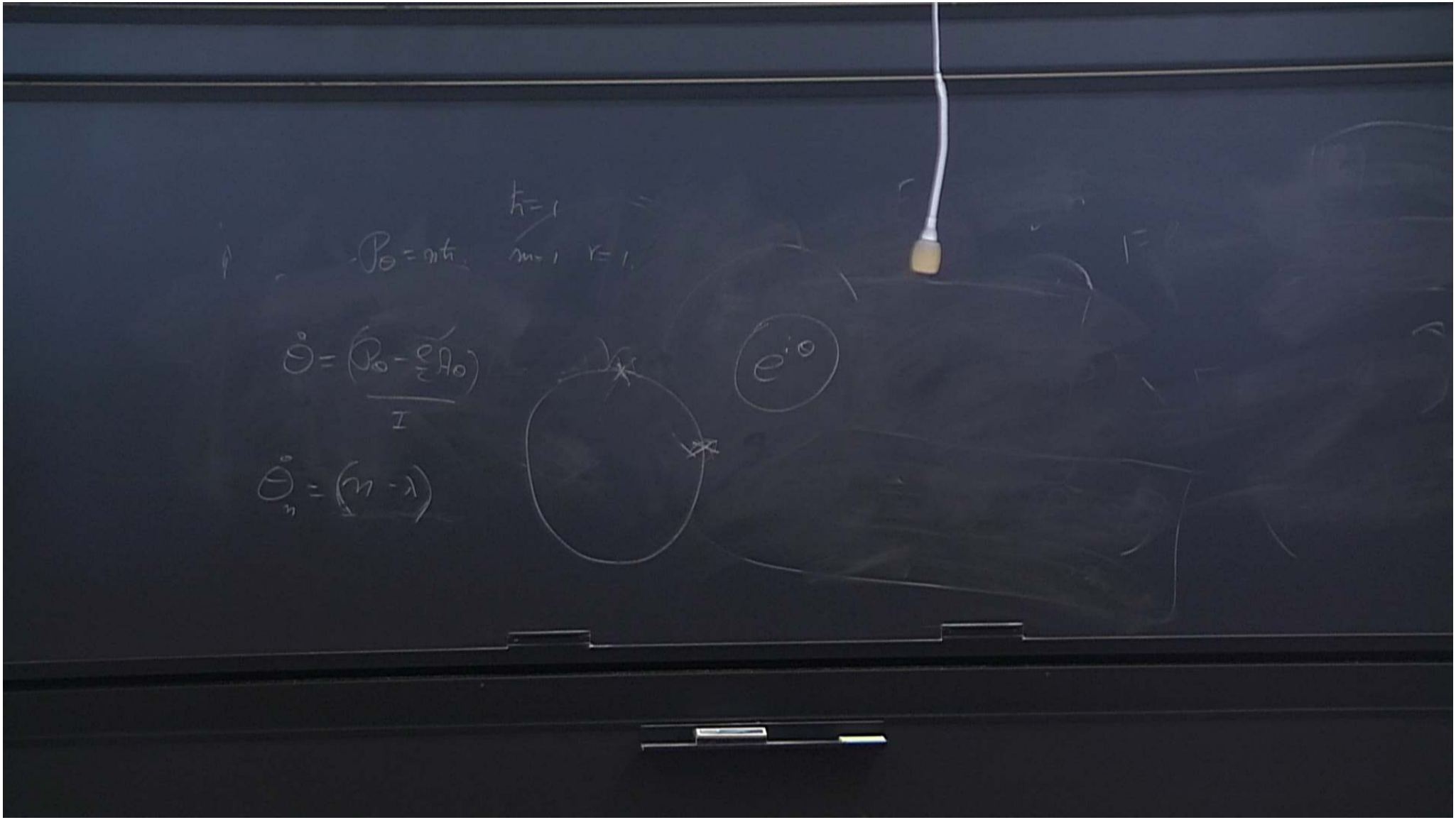

$E = -\nabla\phi - \frac{1}{c}\frac{\partial \vec{A}}{\partial t}$
$H = \frac{\vec{P}_1^2}{2M_1} + \frac{(\vec{P}_2 - \frac{e}{c}\vec{A})}{2m_e}$
$\Gamma = \text{Tr} = \lambda \left(\frac{\Pi_\theta}{I}\right)$
$(\theta = \sum \theta_i)$
$(P_\theta)_i = -\lambda \Pi_\theta = 0,$
$\frac{\lambda}{I}\left[(\Pi_\theta = 0) - (P_\theta = 1)\right]$
$(1 + e^{i\theta}) = e^{i\frac{\theta}{2}}\left[\cos\frac{\theta}{2}\right]$

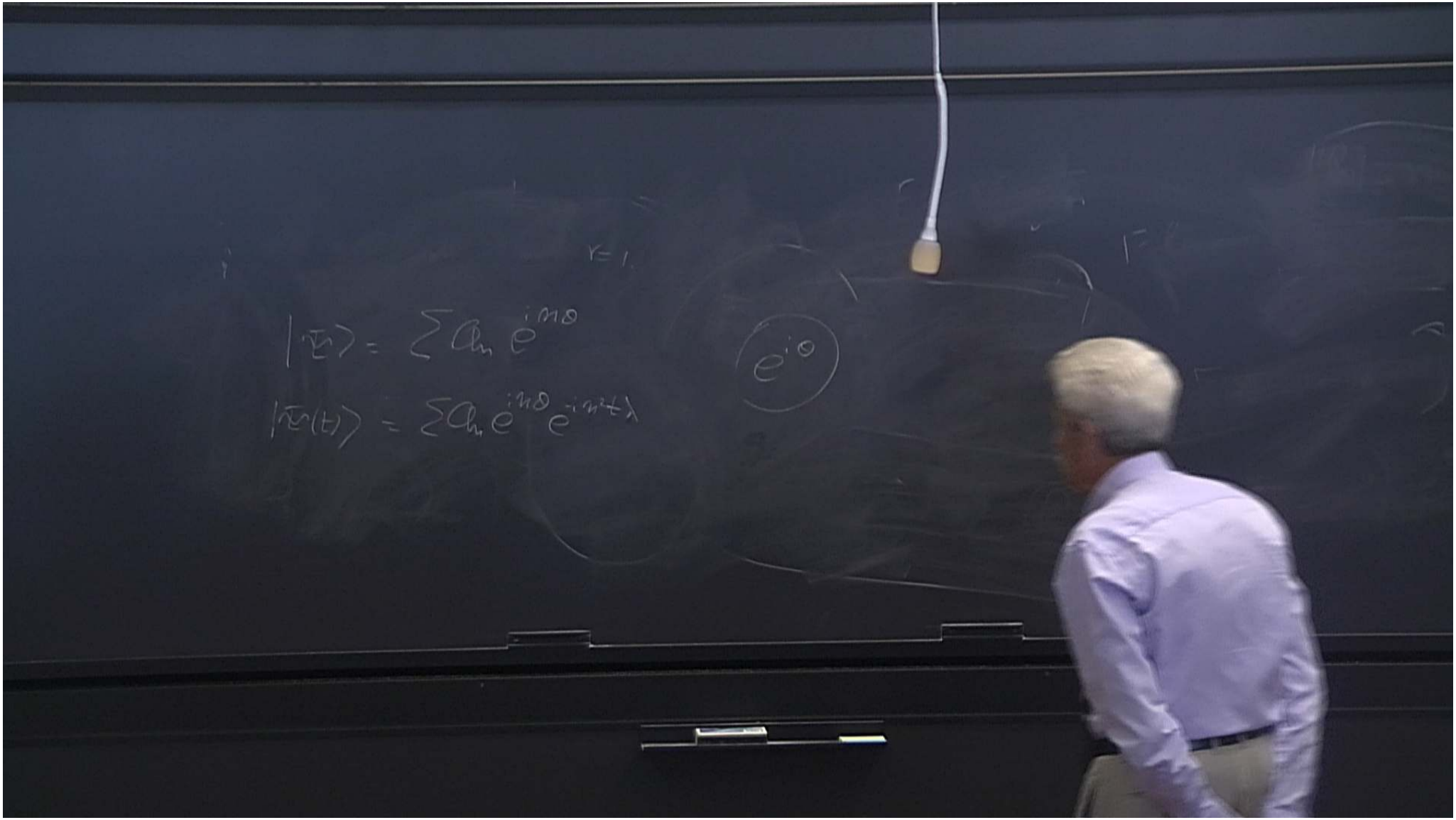

E = -∇E - ∂A/∂t
H = p₁²/2M₁ + (p₂ - eA)/2m
H = (p₁ + eA)²/2M₁ + (p₂ - eA)/2m
Flux = (Π/I)(Θ₁ + Σ Θᵢ)
(p₀)ᵢ = λΠ₀ = 0

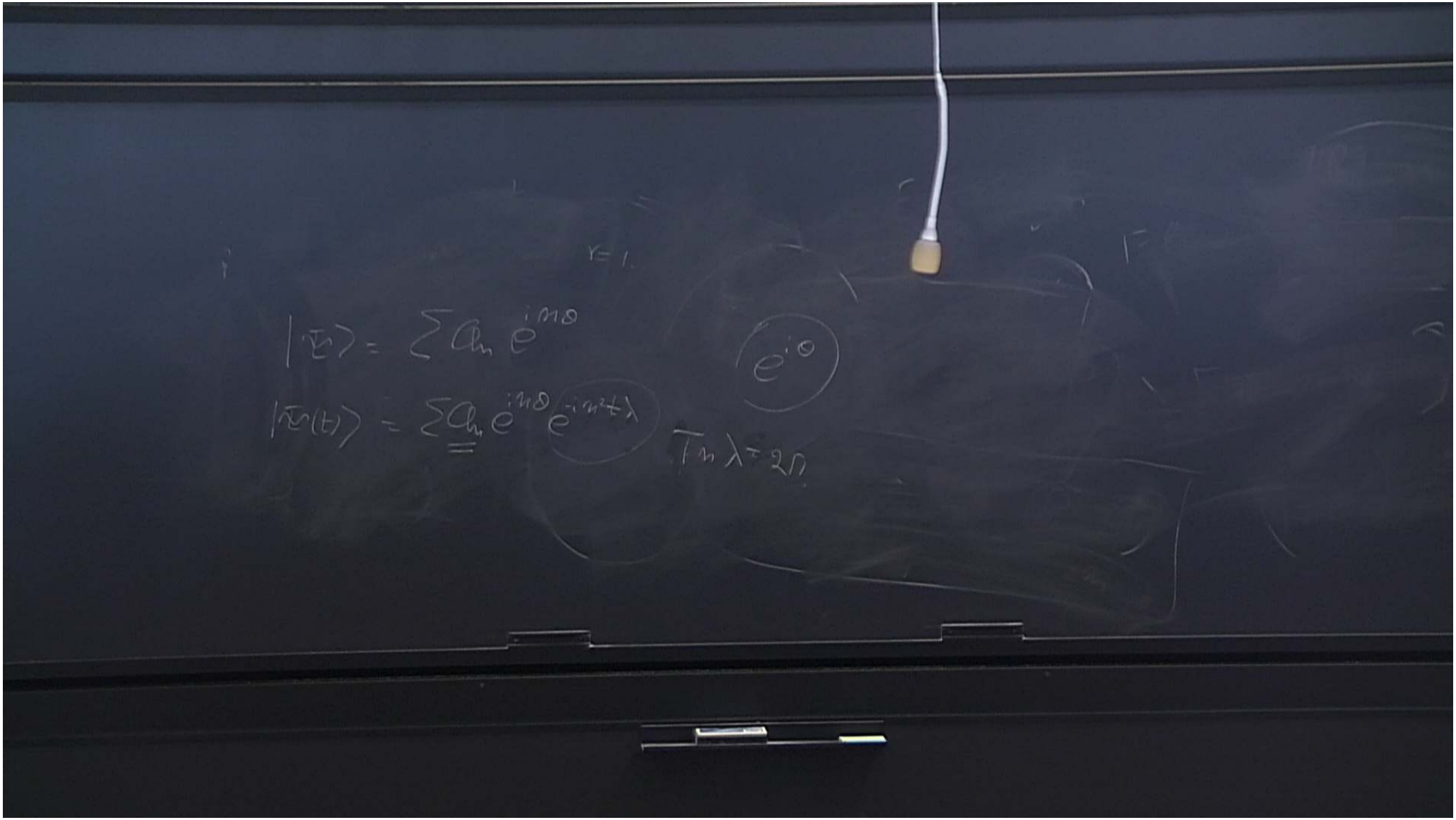

$L = \frac{1}{2} m_1 \vec{v}_1^2 + \frac{1}{2} m_2 \vec{v}_2^2$
$+ (\vec{v}_1 - \vec{v}_2) \cdot \vec{A}(|\vec{r}_1 - \vec{r}_2|)$
$H = \frac{\vec{p}_1^2}{2M_1} + \frac{(\vec{p}_2 - e\vec{A})^2}{2m_e}$
$H = \frac{(\vec{p}_1 + e\vec{A})^2}{2M_1} + \frac{(\vec{p}_2 - e\vec{A})^2}{2m_e}$

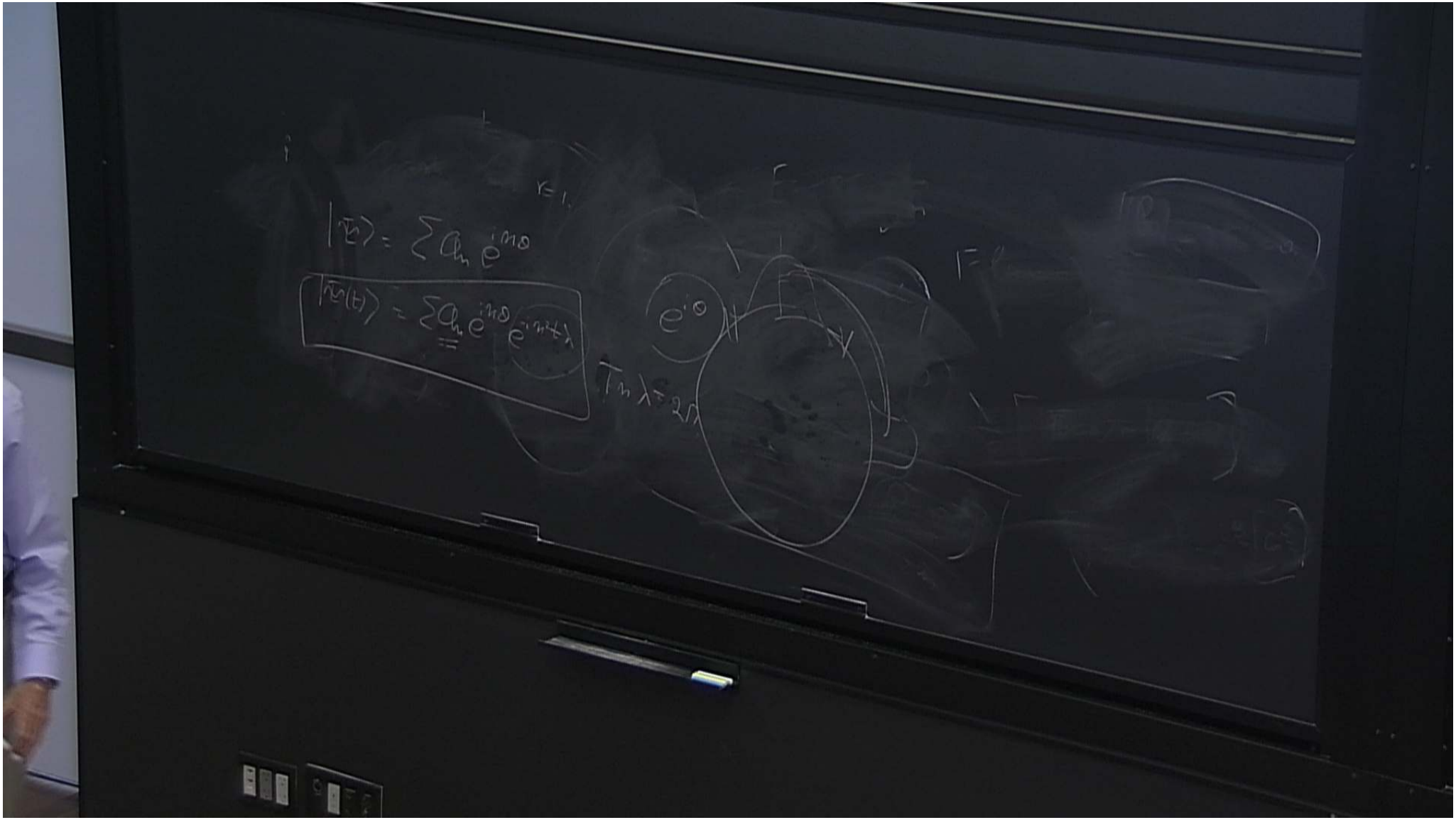

$\dot{\vartheta} = \frac{(P_0 - \varrho A_0)}{I}$
$\ddot{\vartheta}_n = (n - 1)$

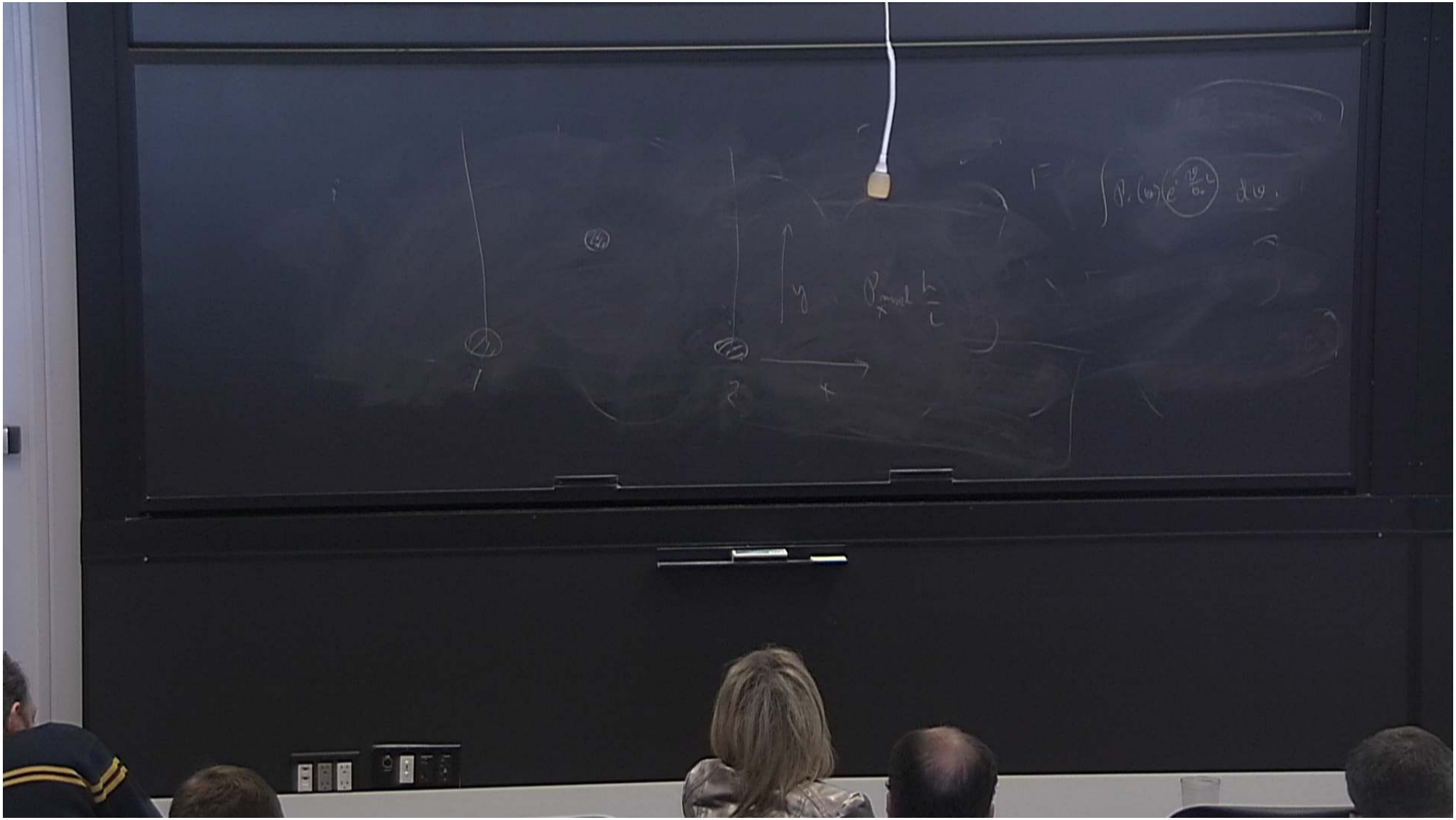

$\hbar = 1$
$P_\theta = n\hbar$
$n = 1$
$r = 1$
$T = 2\pi$
$\dot{\theta} = \frac{(P_\theta - \frac{e}{c}A_\theta)}{I}$
$\dot{\theta}_n = (n - \frac{1}{2})$

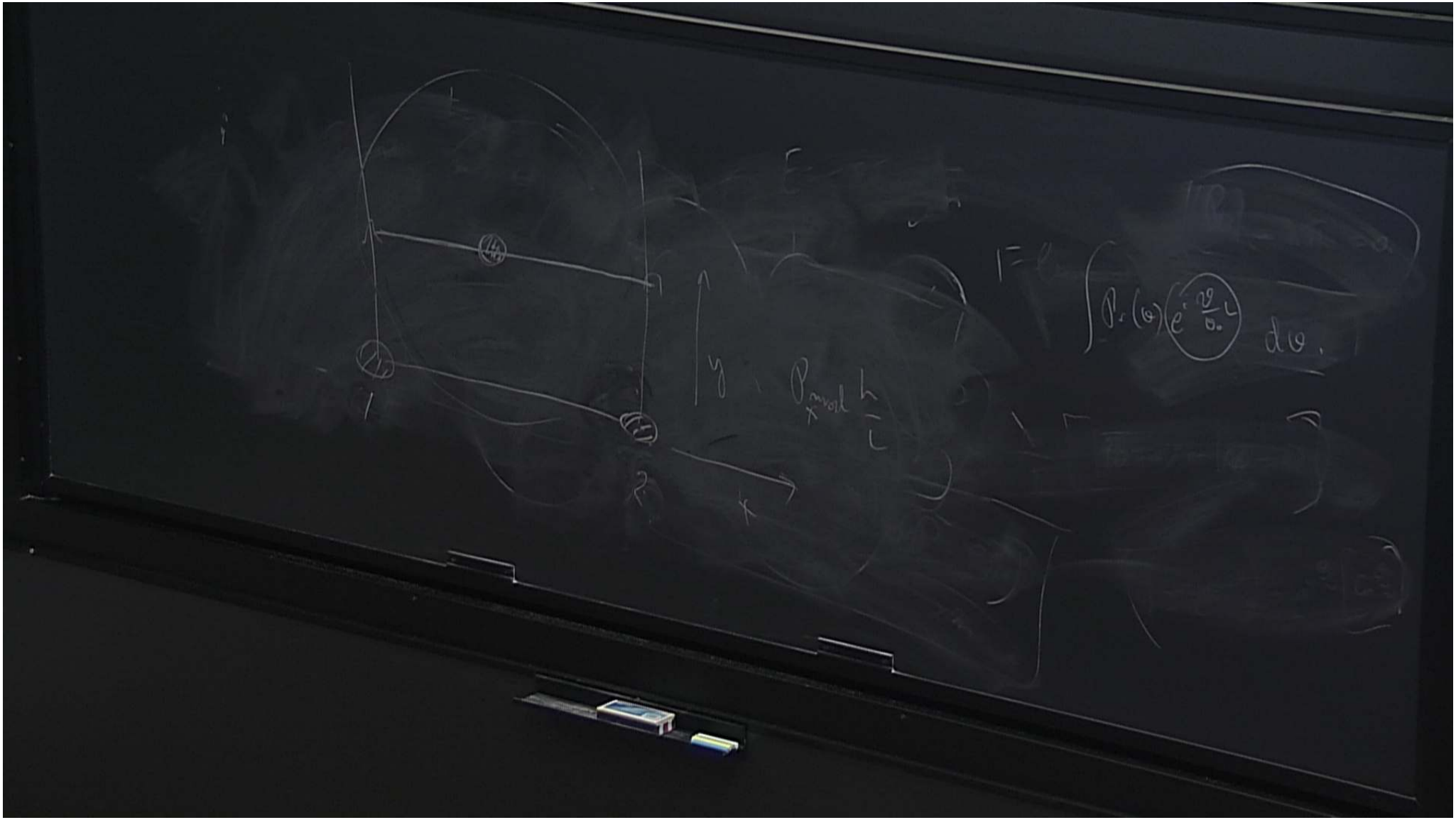

$\hbar = 1$
$P_0 = m$
$m = 1$
$r = 1$
$\dot{\theta} = \frac{(P_0 - \frac{e}{c} A_0)}{I}$
$\dot{\theta}_n = (n - \lambda)$
$e^{i\theta}$

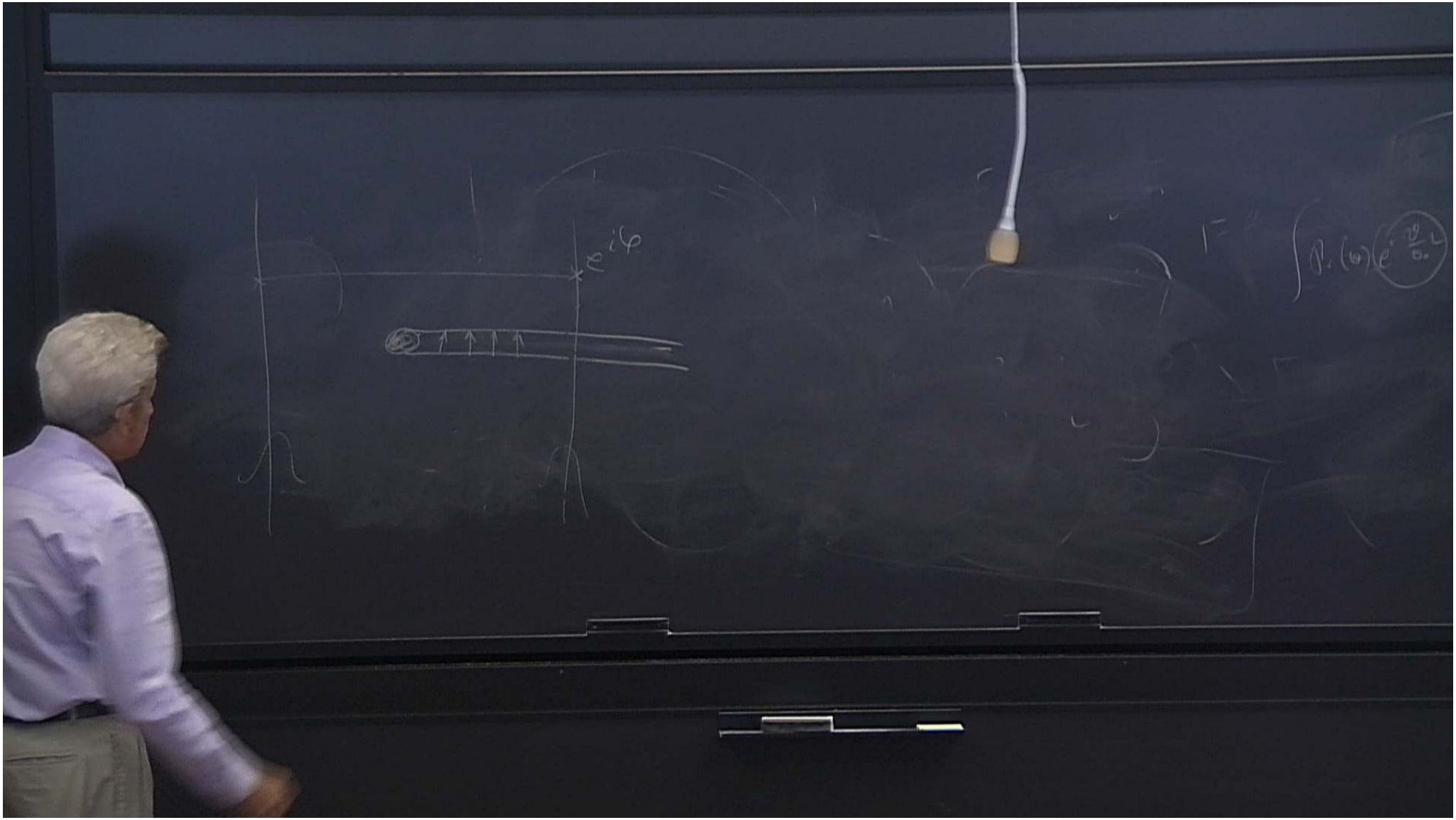

r=1
$|\Psi\rangle = \sum a_n e^{in\theta}$
$|\Psi(t)\rangle = \sum a_n e^{in\theta} e^{-in^2 t\lambda}$
$e^{i\theta}$

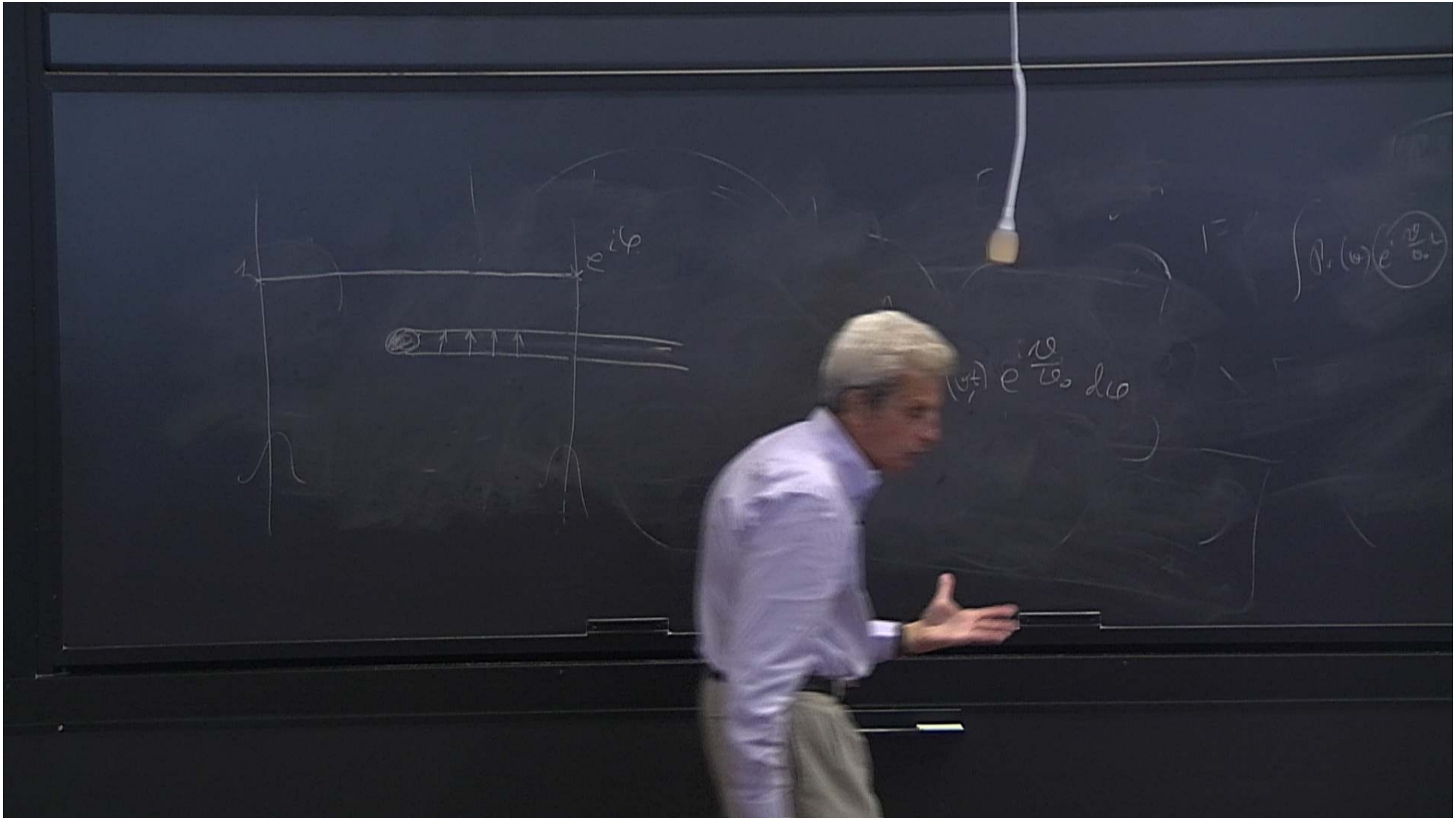

r = 1
$|\psi\rangle = \sum a_m e^{im\theta}$
$|\psi(t)\rangle = \sum a_m e^{im\theta} e^{-im^2 t\lambda}$
$e^{i\theta}$
$T = \lambda = 2\pi$

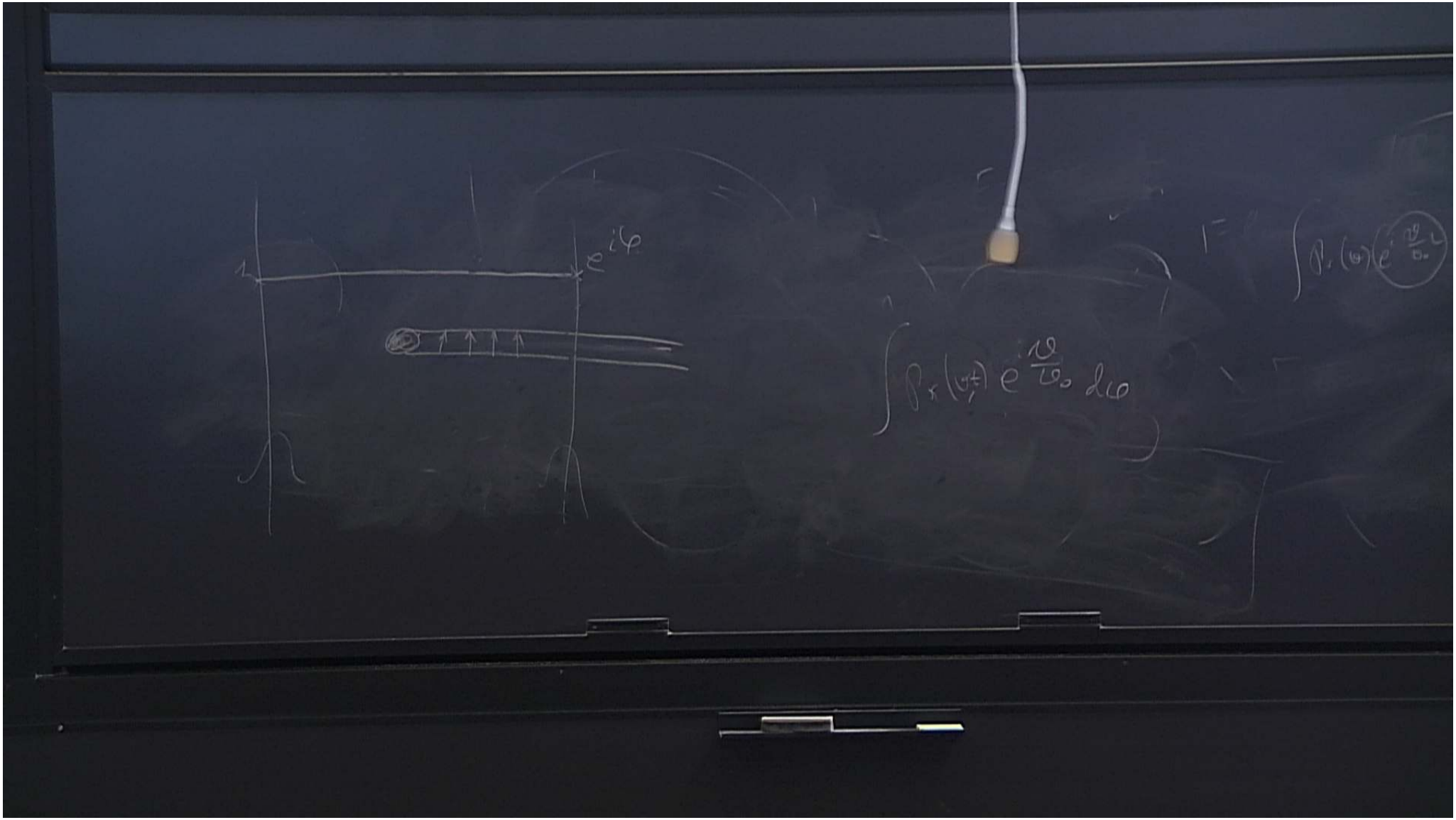

r=1
$|\psi\rangle = \sum a_m e^{im\theta}$
$|\psi(t)\rangle = \sum a_m e^{im\theta} e^{-im^2 t}$
$e^{i\theta}$
$m\lambda = 2\pi$

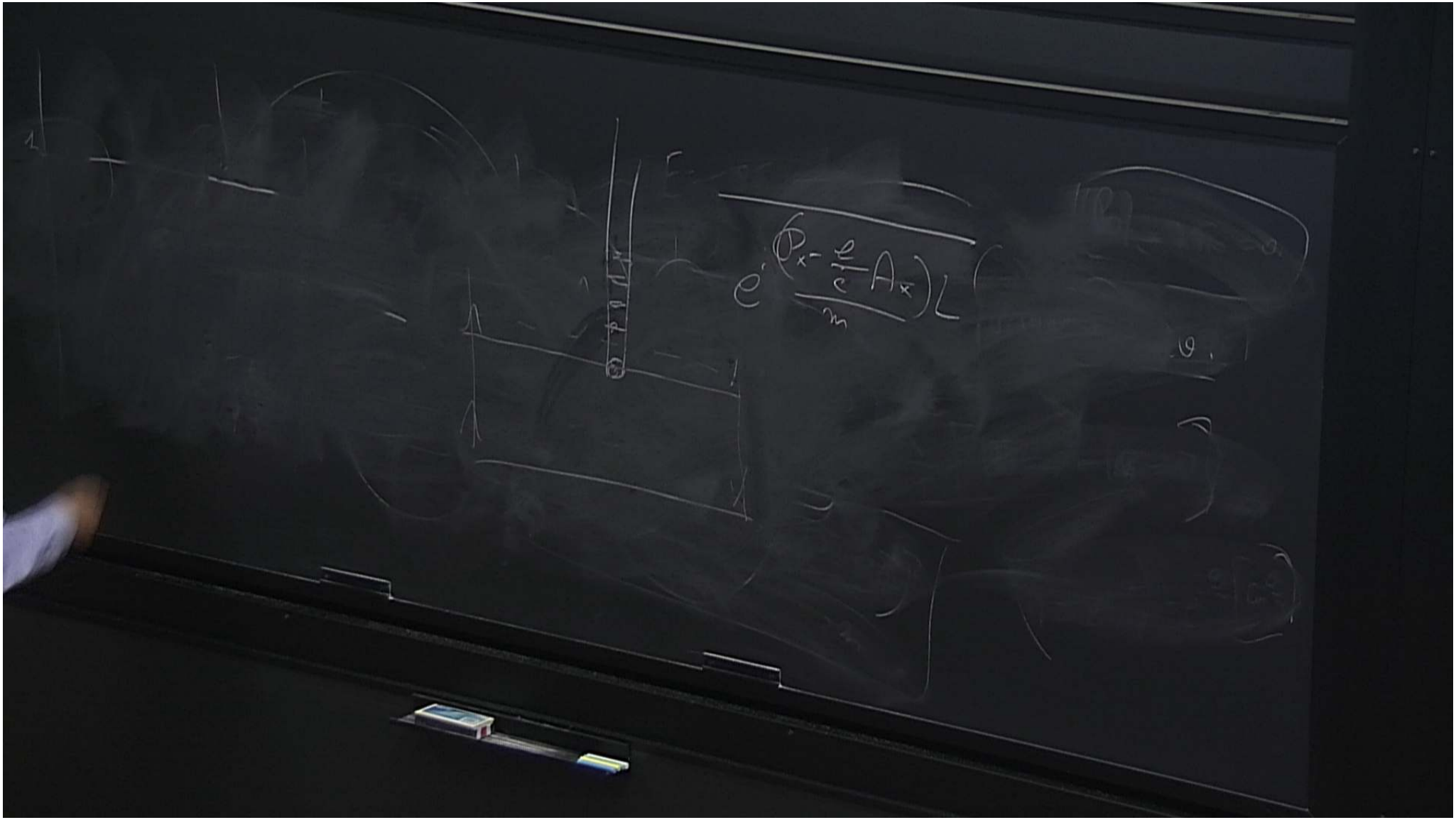


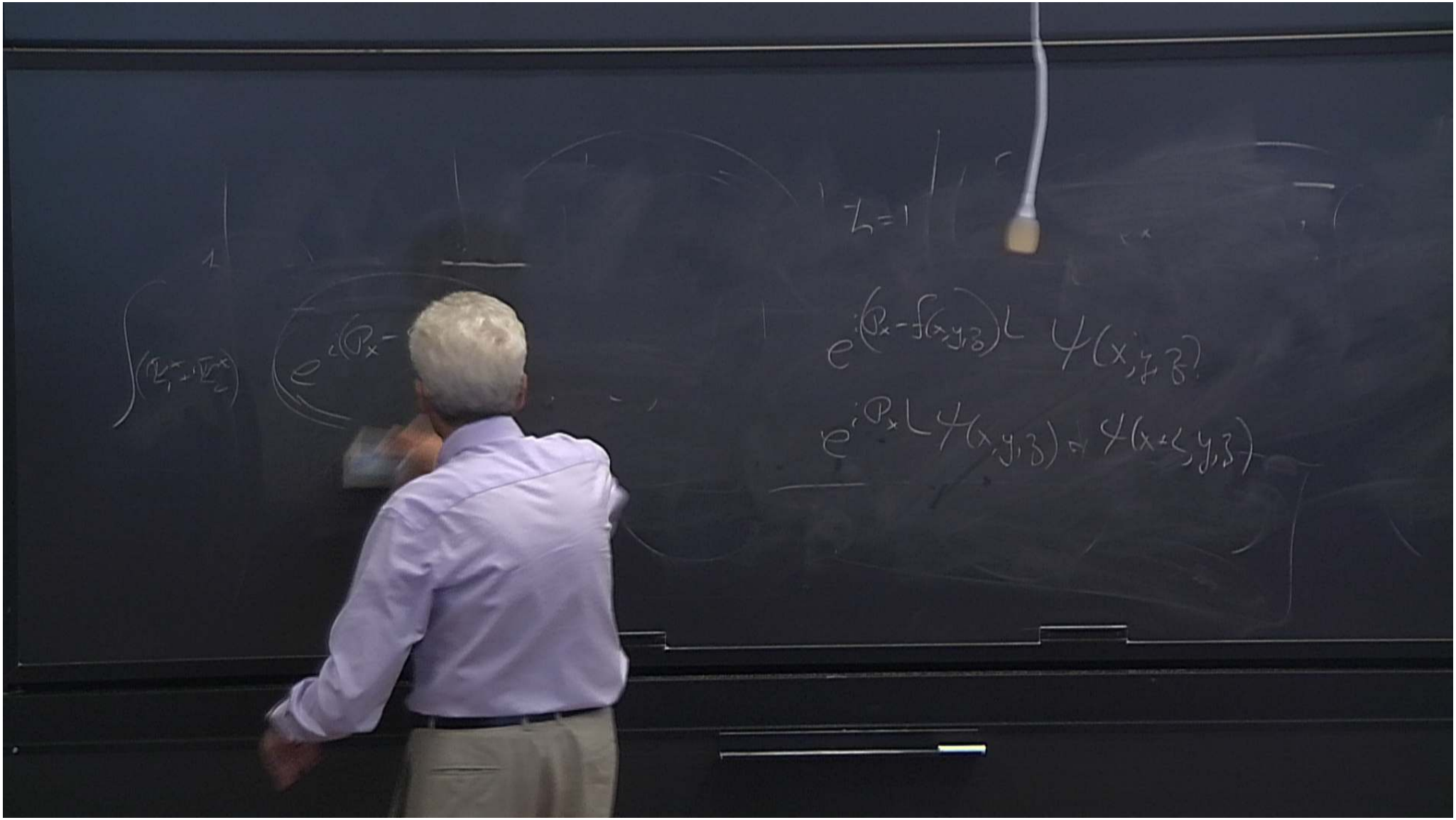


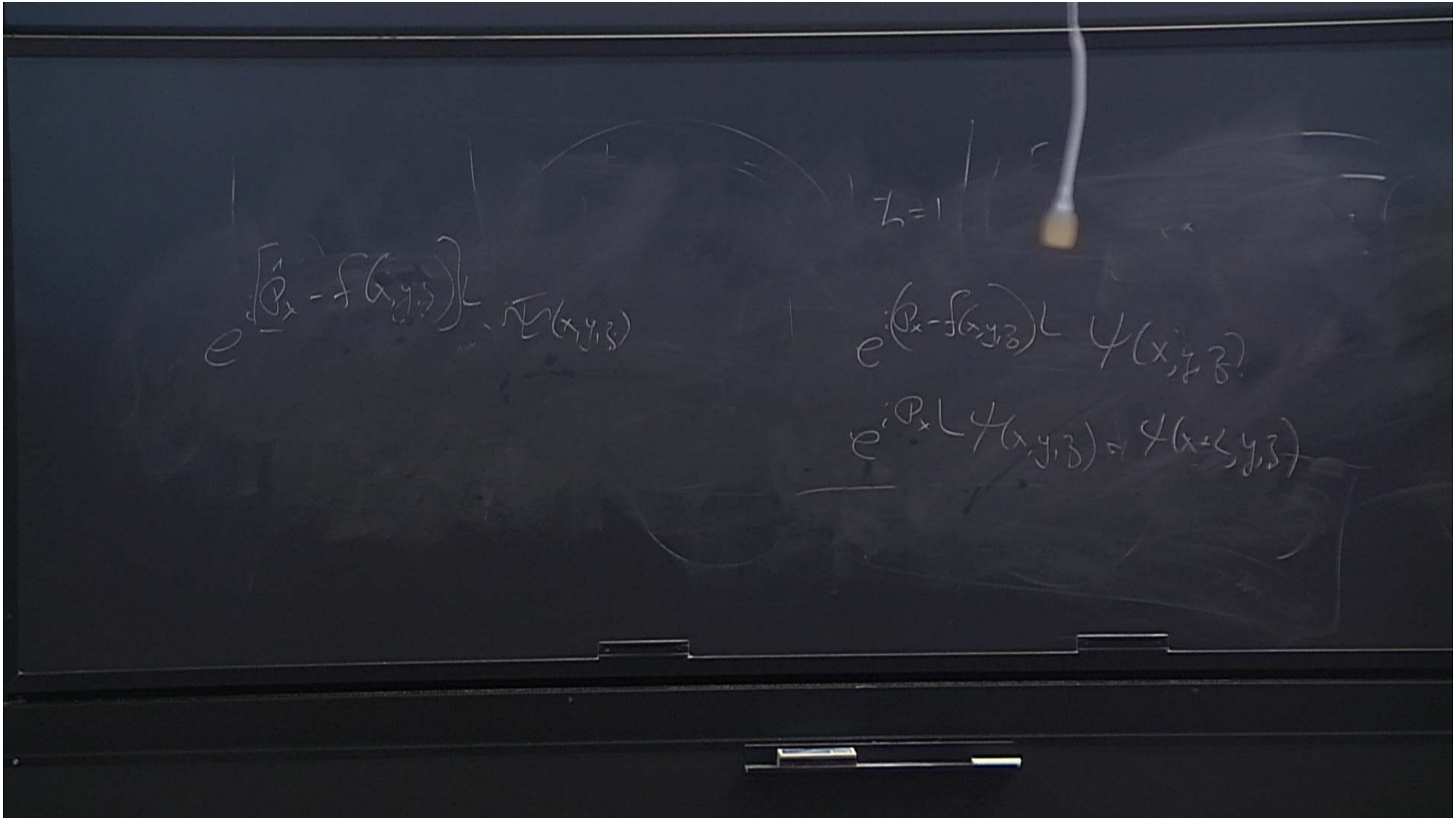


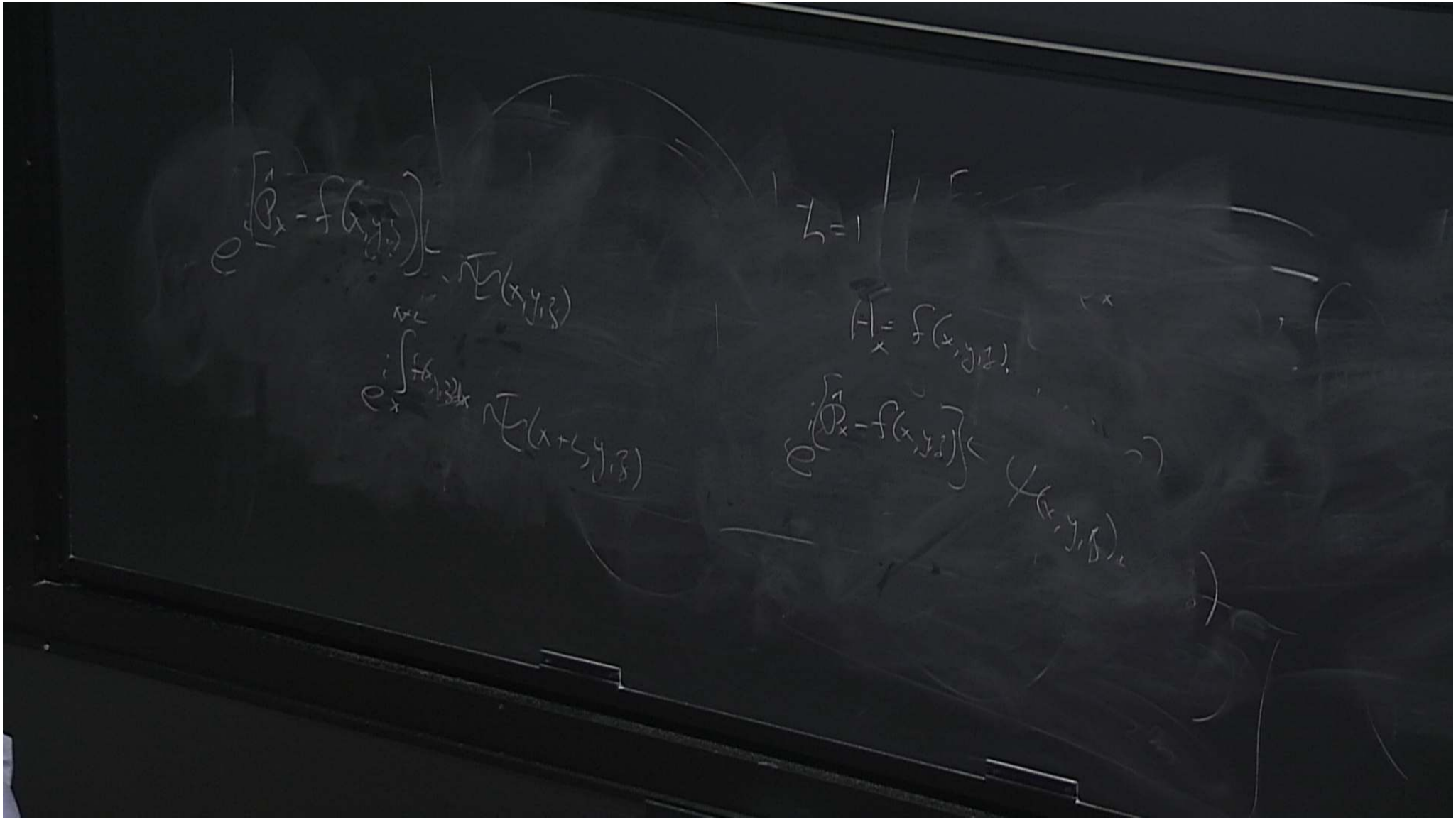


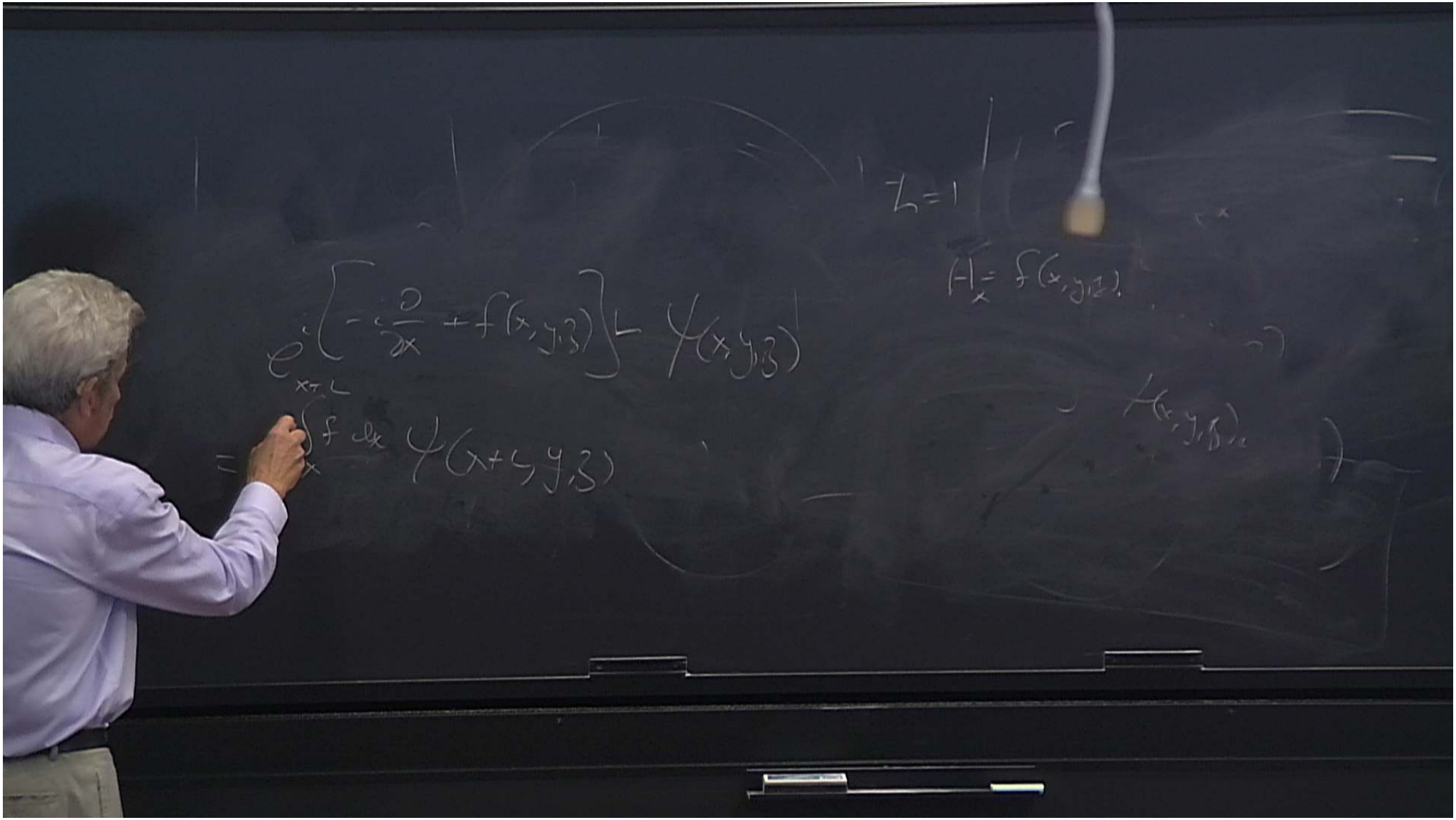

$e^{i\phi}$
$\int \beta_x(\omega_j t)\, e^{i\frac{\omega}{\omega_0}} d\omega$

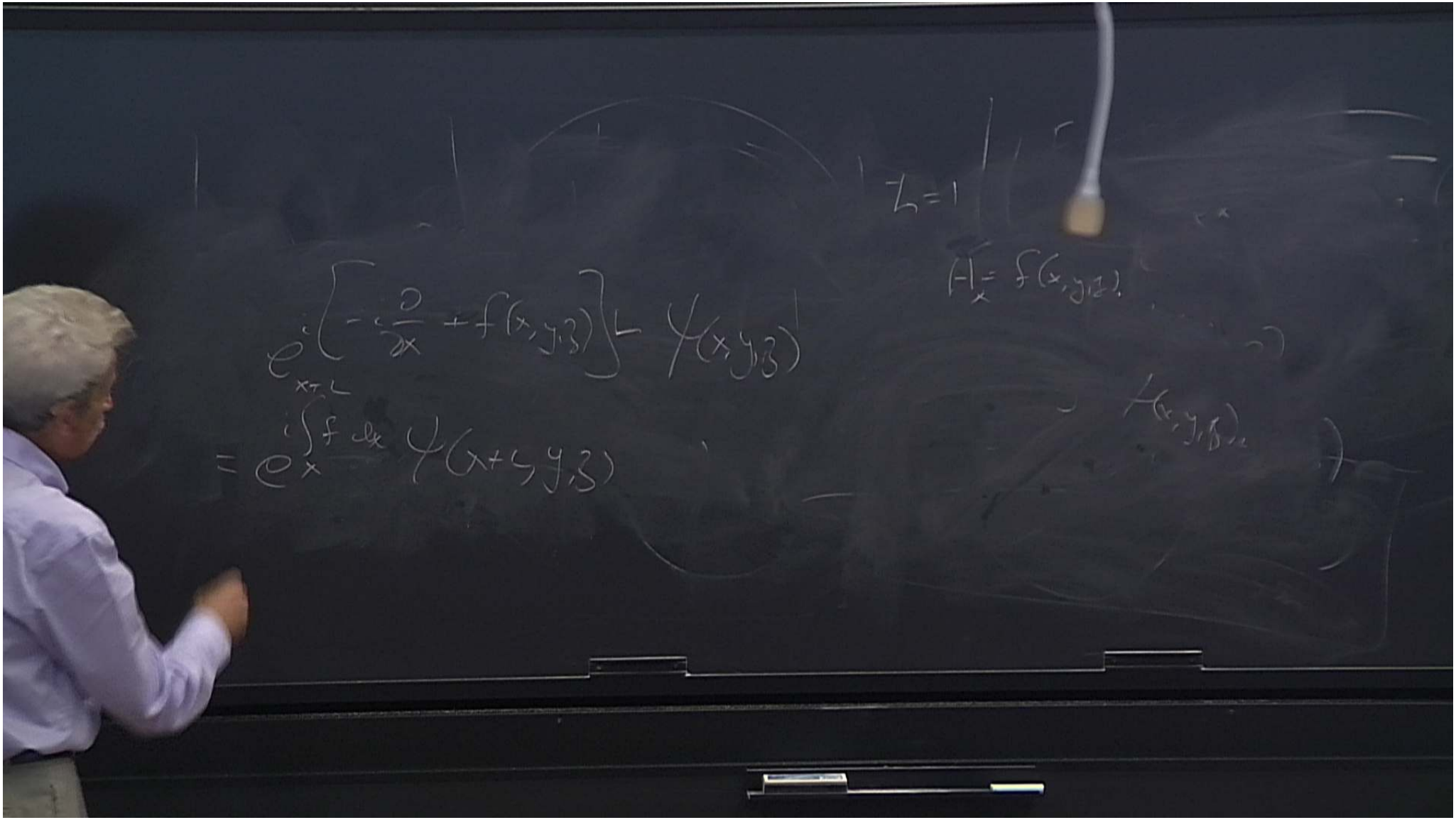

$e^{i\left(p_x - \frac{e}{c}A_x\right)L}$

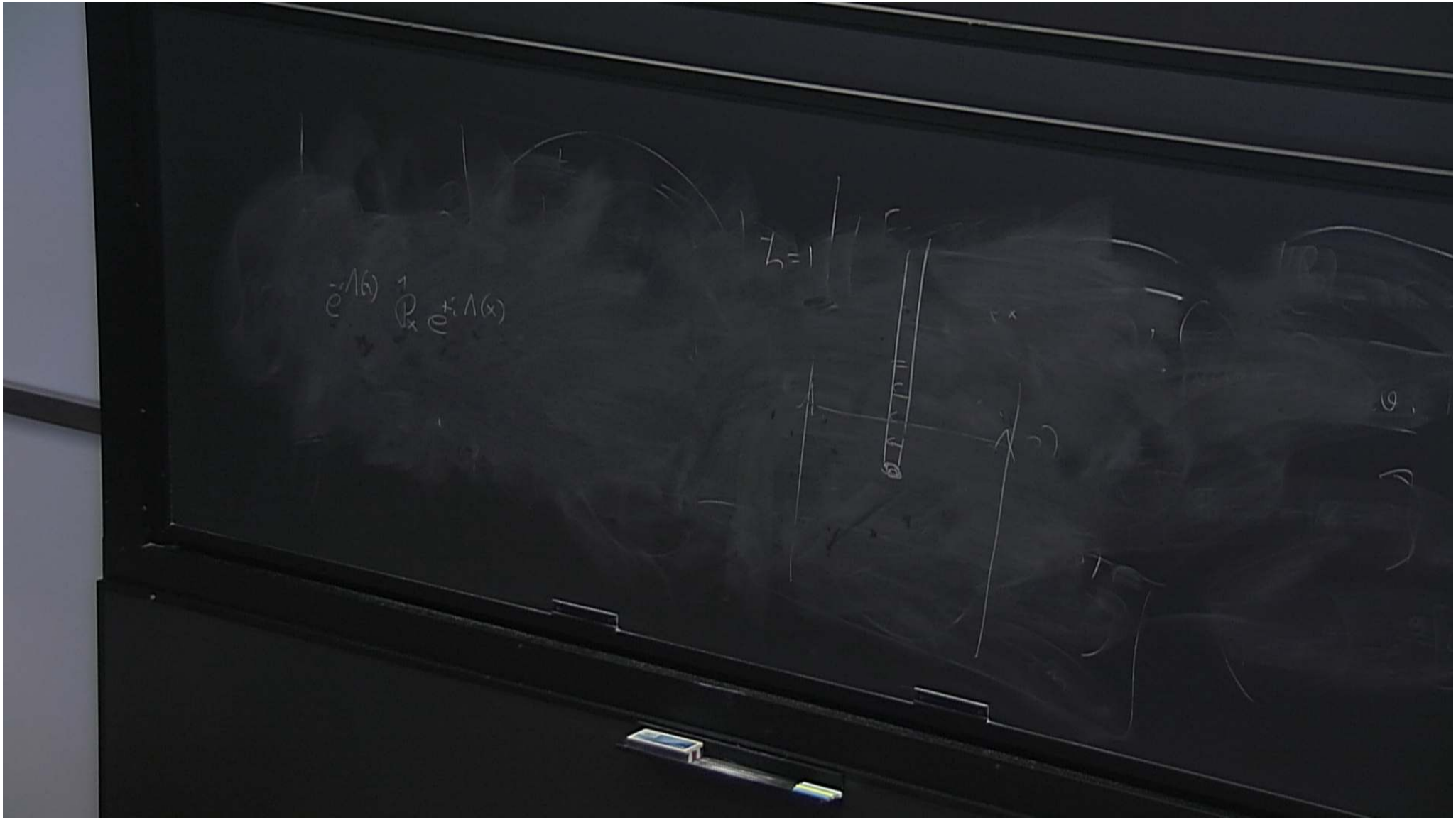

$\int_{(\Sigma_1 - \Sigma_2)}$
$e^{i(P_x -$
$z = 1$
$e^{i(P_x - f(x,y,z))L}\ \psi(x,y,z)$
$e^{iP_x L}\ \psi(x,y,z) = \psi(x-L,y,z)$

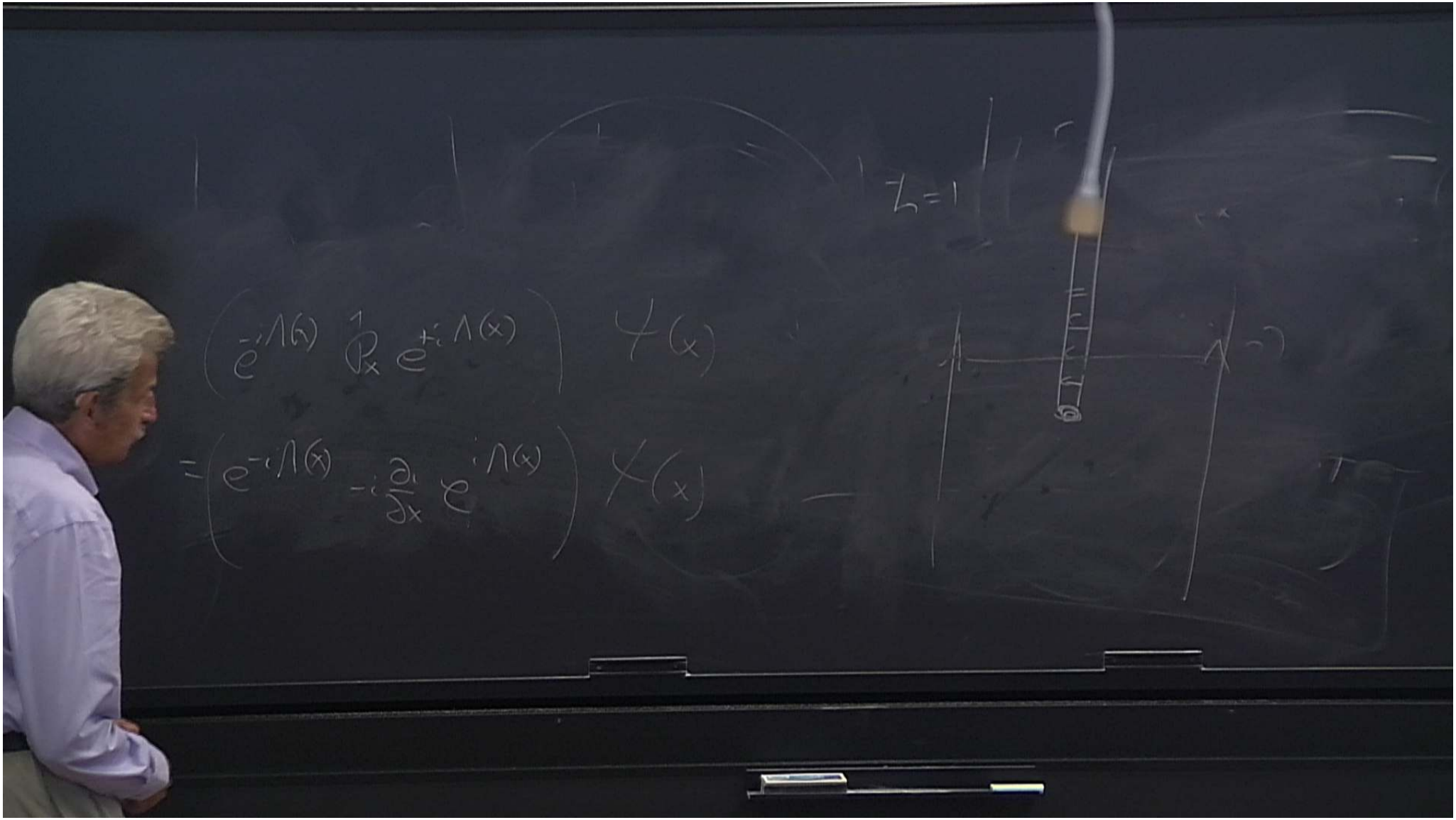

$\hbar = 1$
$e^{i\left[\hat{p}_x - f(x,y,z)\right]L} \cdot \psi(x,y,z)$
$e^{i(p_x - f(x,y,z))L}\ \psi(x,y,z)$
$e^{ip_xL}\psi(x,y,z) = \psi(x+L,y,z)$

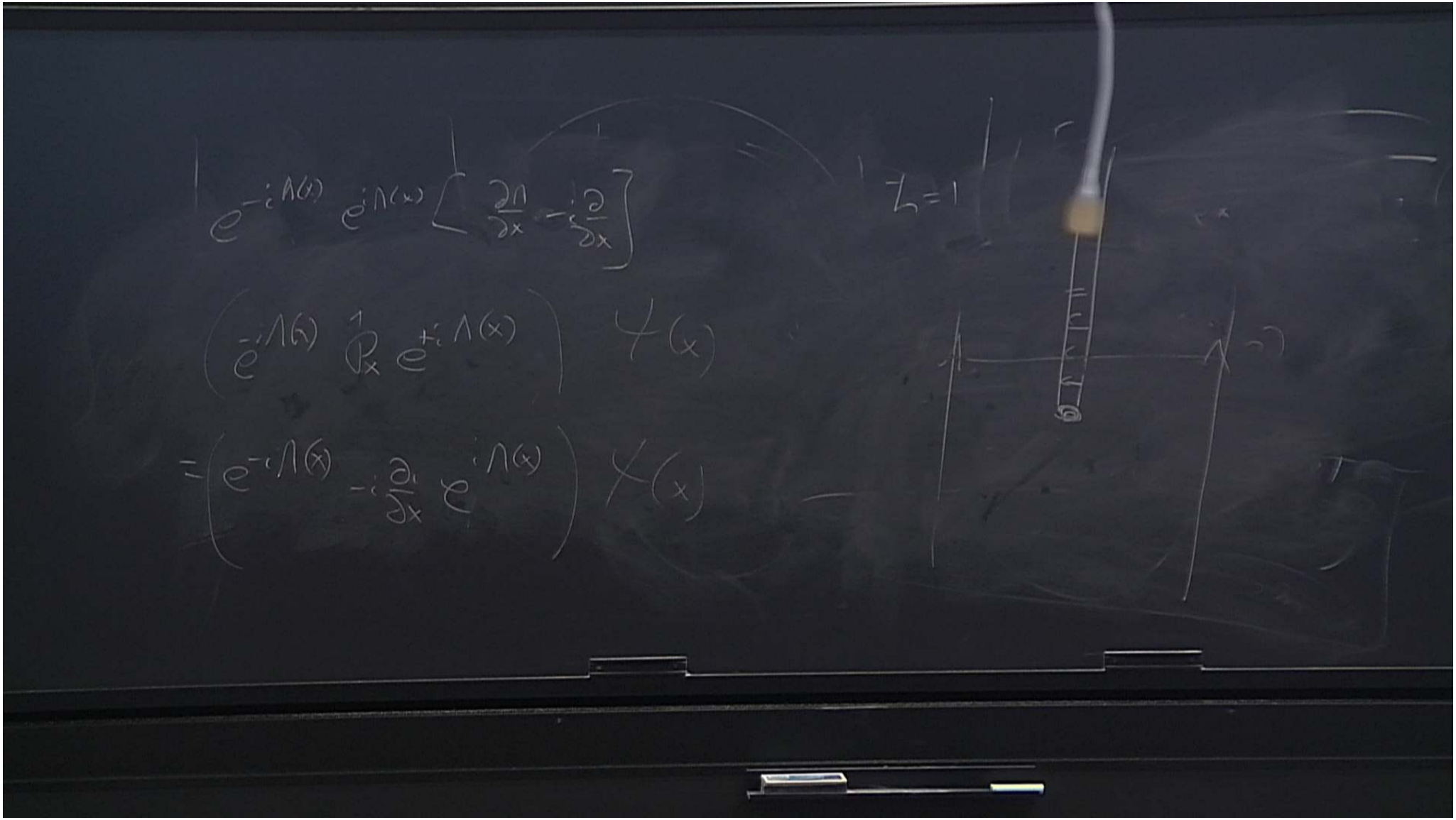


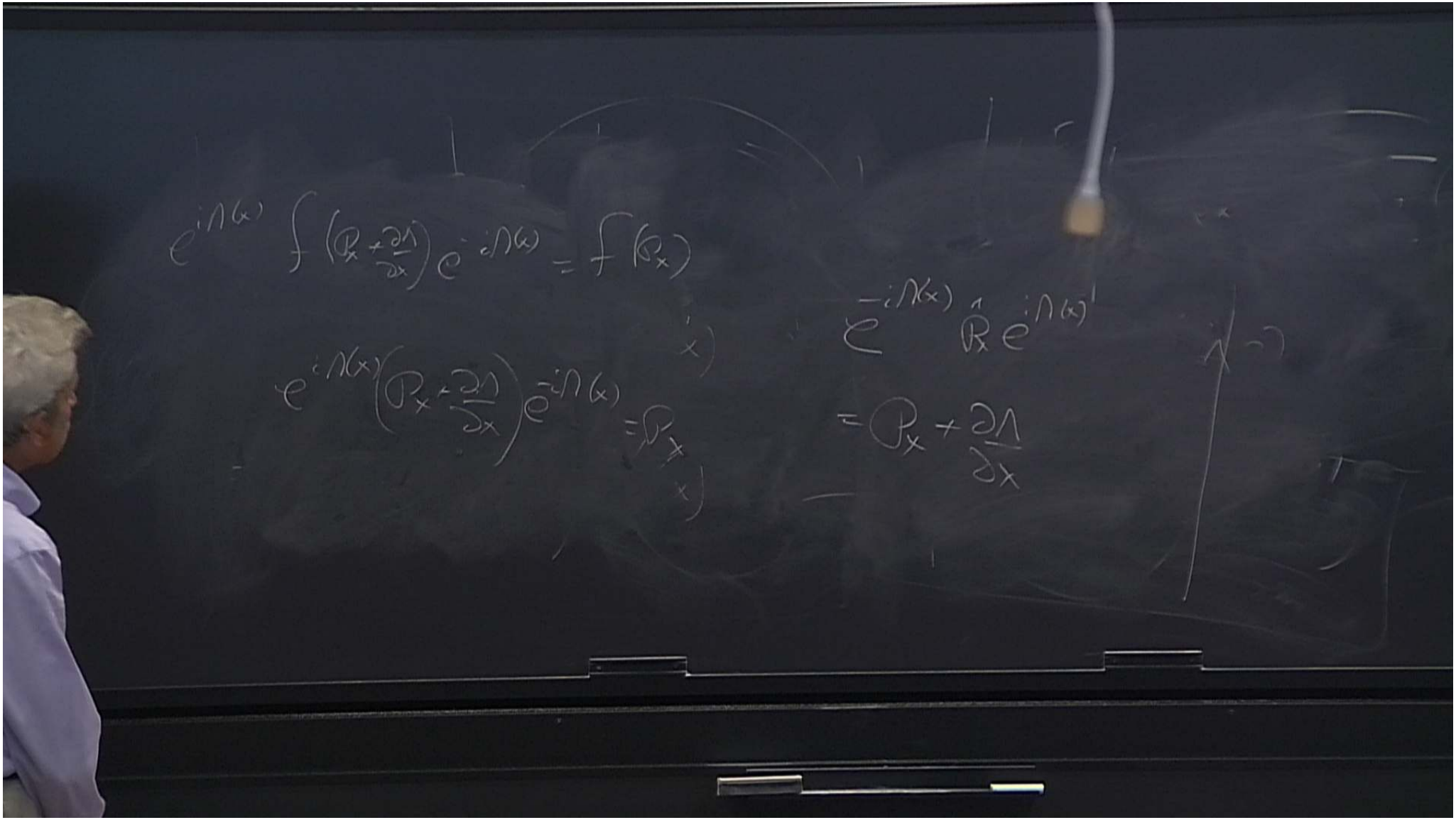

$z=1$
$\frac{\partial}{\partial x} + f(x,y,z)$
$\psi(x,y,z)$
$\int f\,dx\ \psi(x+\epsilon,y,z)$

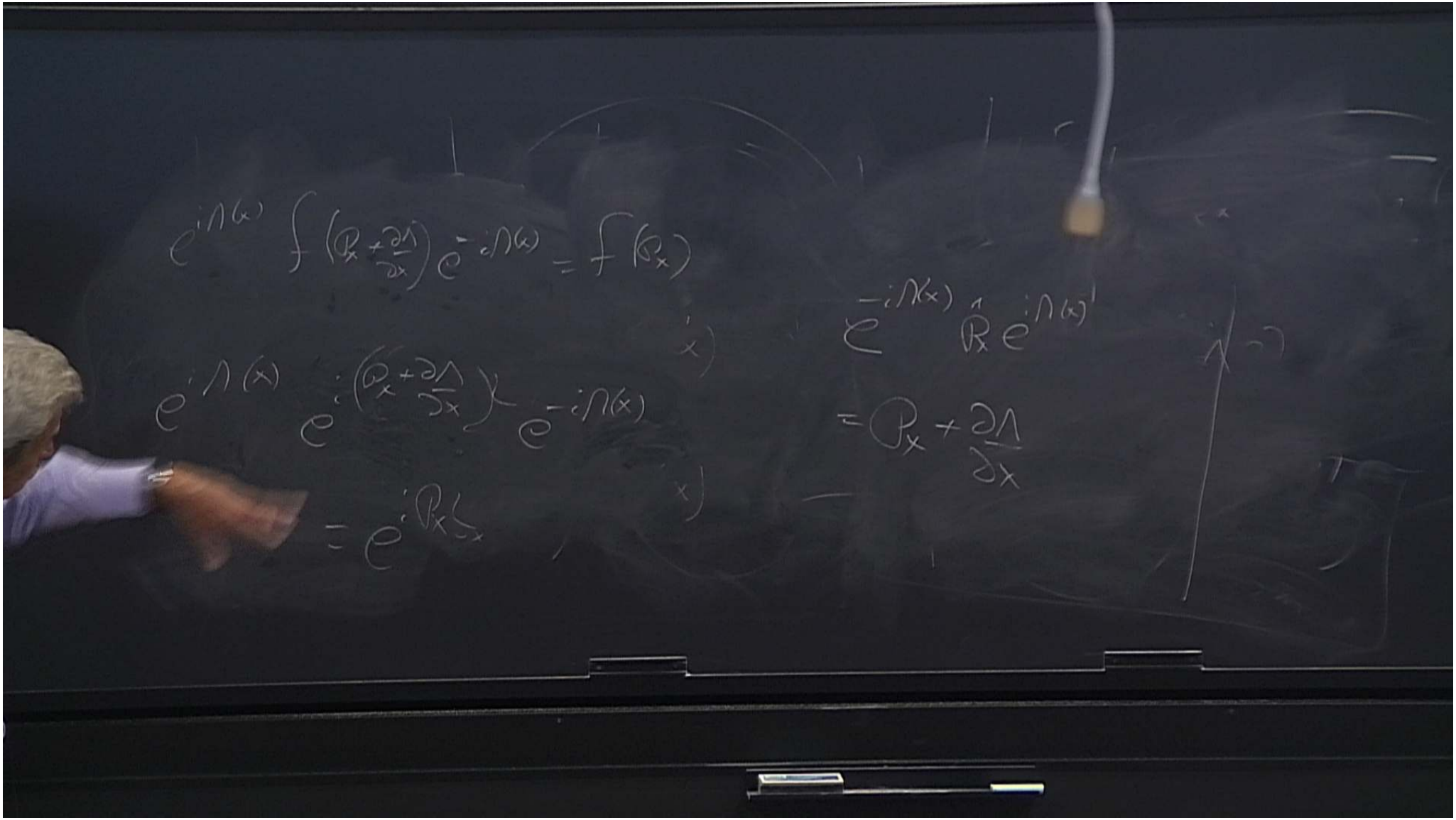
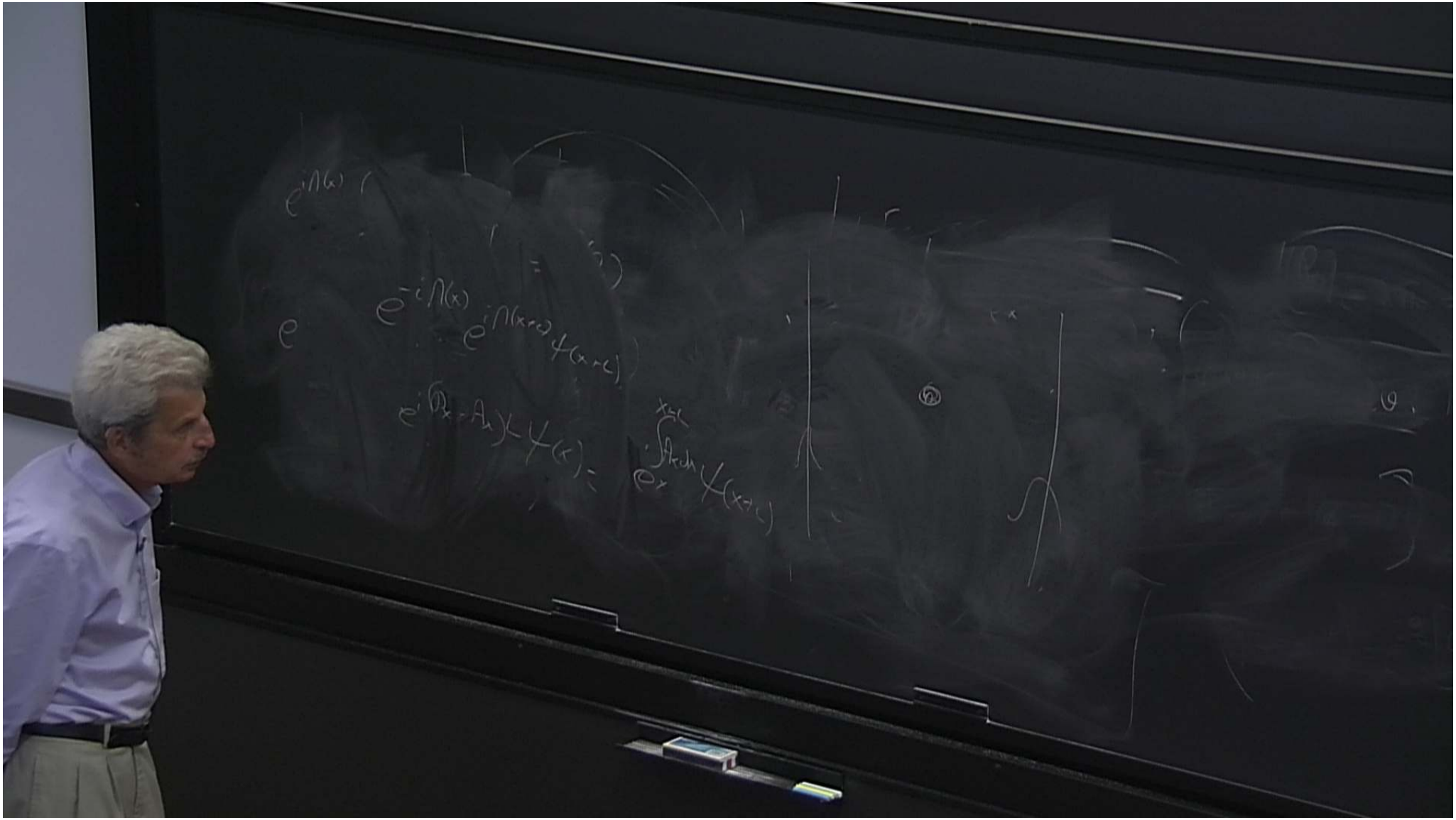
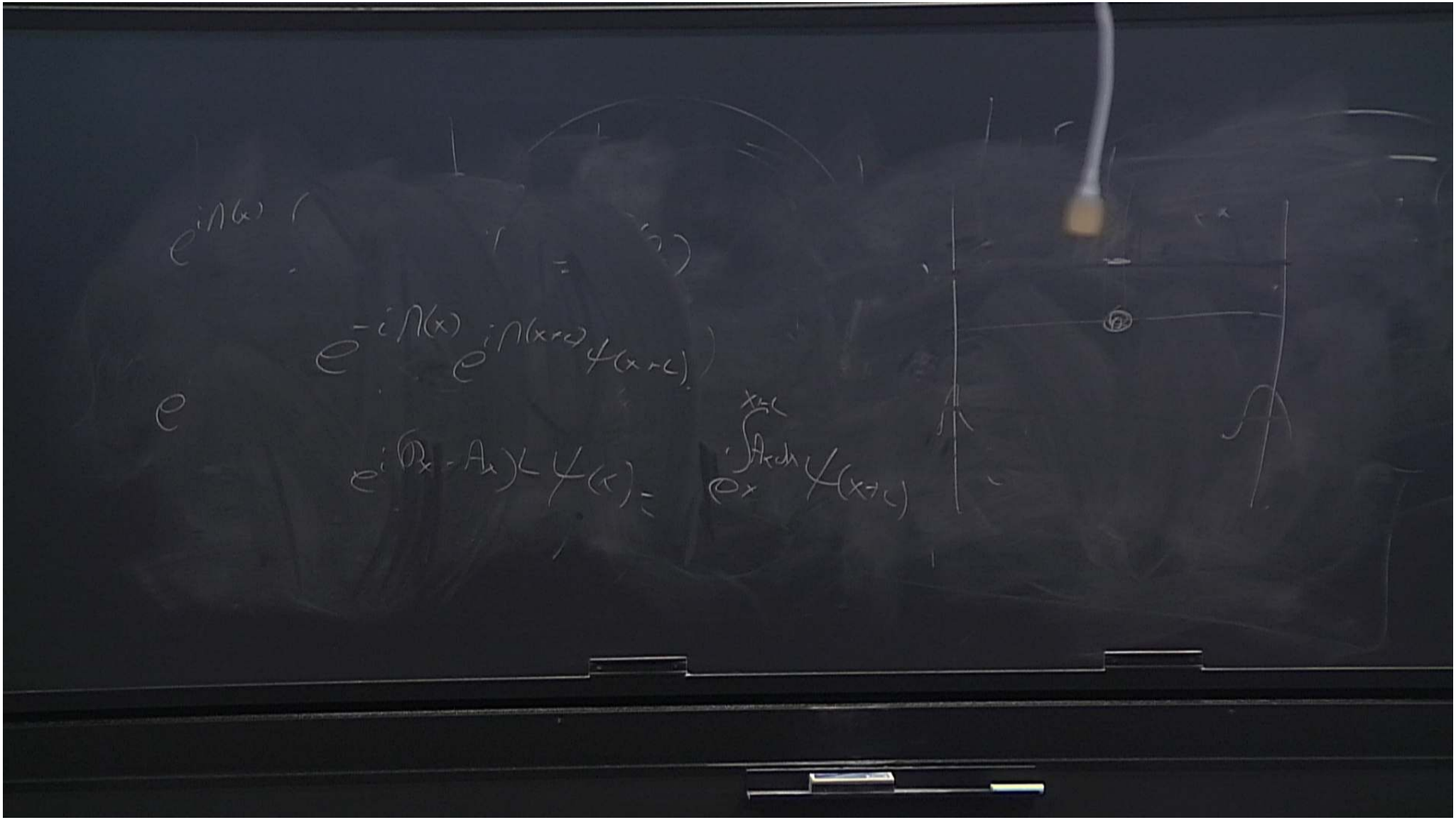
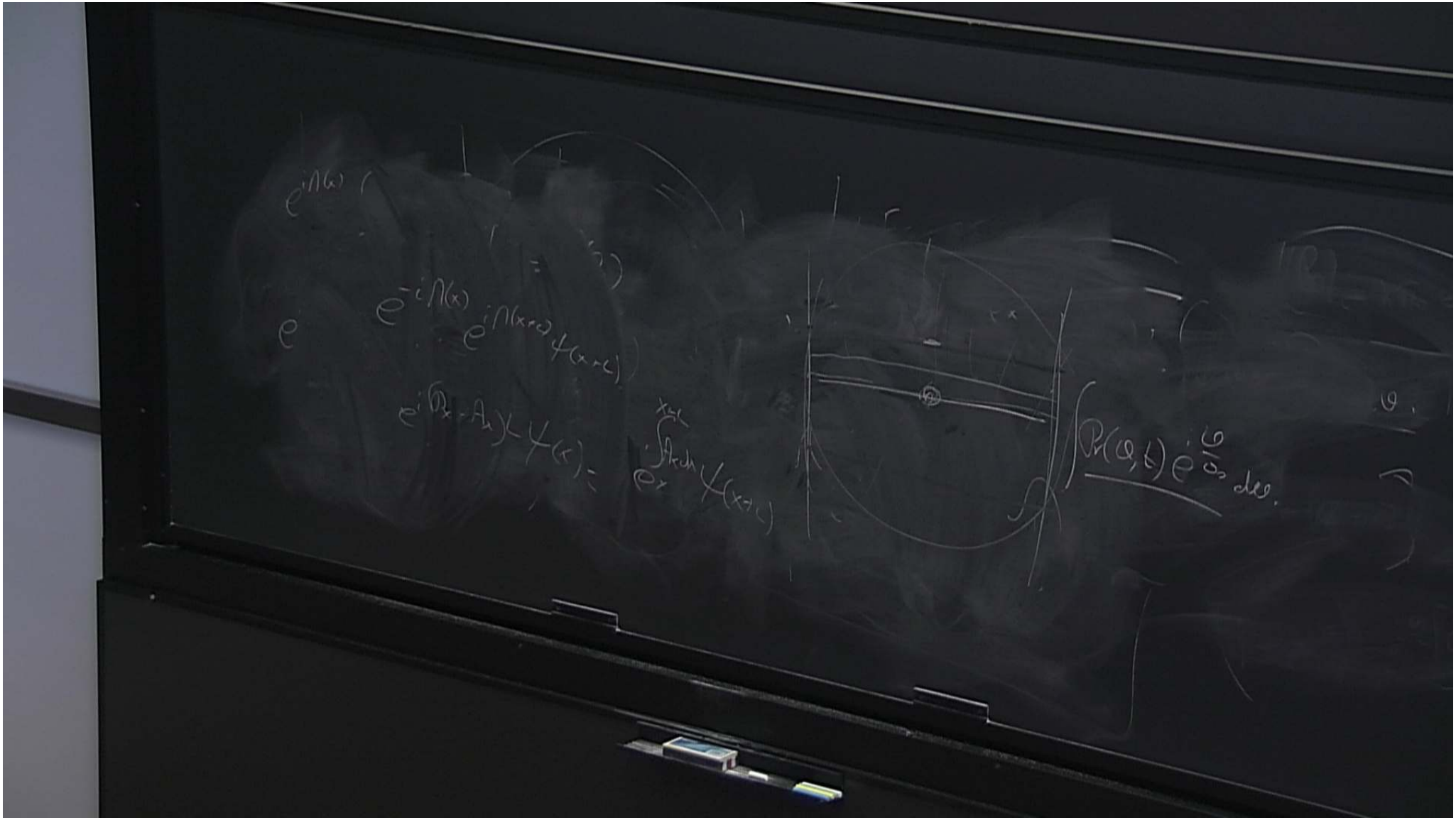

$Z_1 = 1$
$A_x = f(x,y,z)$
$e^{\int_{x_0}^{x} \left[-\frac{\partial}{\partial x} + f(x,y,z)\right] dx} \psi(x,y,z)$
$= e^{\int_{x_0}^{x} f\, dx} \psi(x+\epsilon, y, z)$




$Z_2 = 1$
$\left(e^{-i\Lambda(x)} \frac{1}{P_x} e^{+i\Lambda(x)} \right) \chi(x)$
$= \left(e^{-i\Lambda(x)} \frac{1}{-i\frac{\partial}{\partial x}} e^{i\Lambda(x)} \right) \chi(x)$


$e^{-i\Lambda(x)}\, e^{i\Lambda(x)} \left[\frac{\partial}{\partial x} - i\frac{\partial}{\partial x} \right]$
$Z_2 = 1$
$\left(e^{-i\Lambda(x)} \frac{1}{P_x} e^{+i\Lambda(x)} \right) \psi(x)$
$= \left(e^{-i\Lambda(x)} - i\frac{\partial}{\partial x} e^{i\Lambda(x)} \right) \psi(x)$


$e^{i\Lambda(x)} f\left(P_x + \frac{\partial \Lambda}{\partial x}\right) e^{-i\Lambda(x)} = f(P_x)$
$e^{-i\Lambda(x)} \hat{P}_x e^{i\Lambda(x)}$
$e^{i\Lambda(x)}\left(P_x + \frac{\partial \Lambda}{\partial x}\right) e^{-i\Lambda(x)} = P_x$
$= P_x + \frac{\partial \Lambda}{\partial x}$


$e^{i\Lambda(x)} f\left(P_x + \frac{\partial \Lambda}{\partial x}\right) e^{-i\Lambda(x)} = f(P_x)$
$e^{i\Lambda(x)} e^{i\left(P_x + \frac{\partial \Lambda}{\partial x}\right)x} e^{-i\Lambda(x)}$
$= e^{iP_x x}$
$e^{-i\Lambda(x)} \hat{P}_x e^{i\Lambda(x)}$
$= P_x + \frac{\partial \Lambda}{\partial x}$