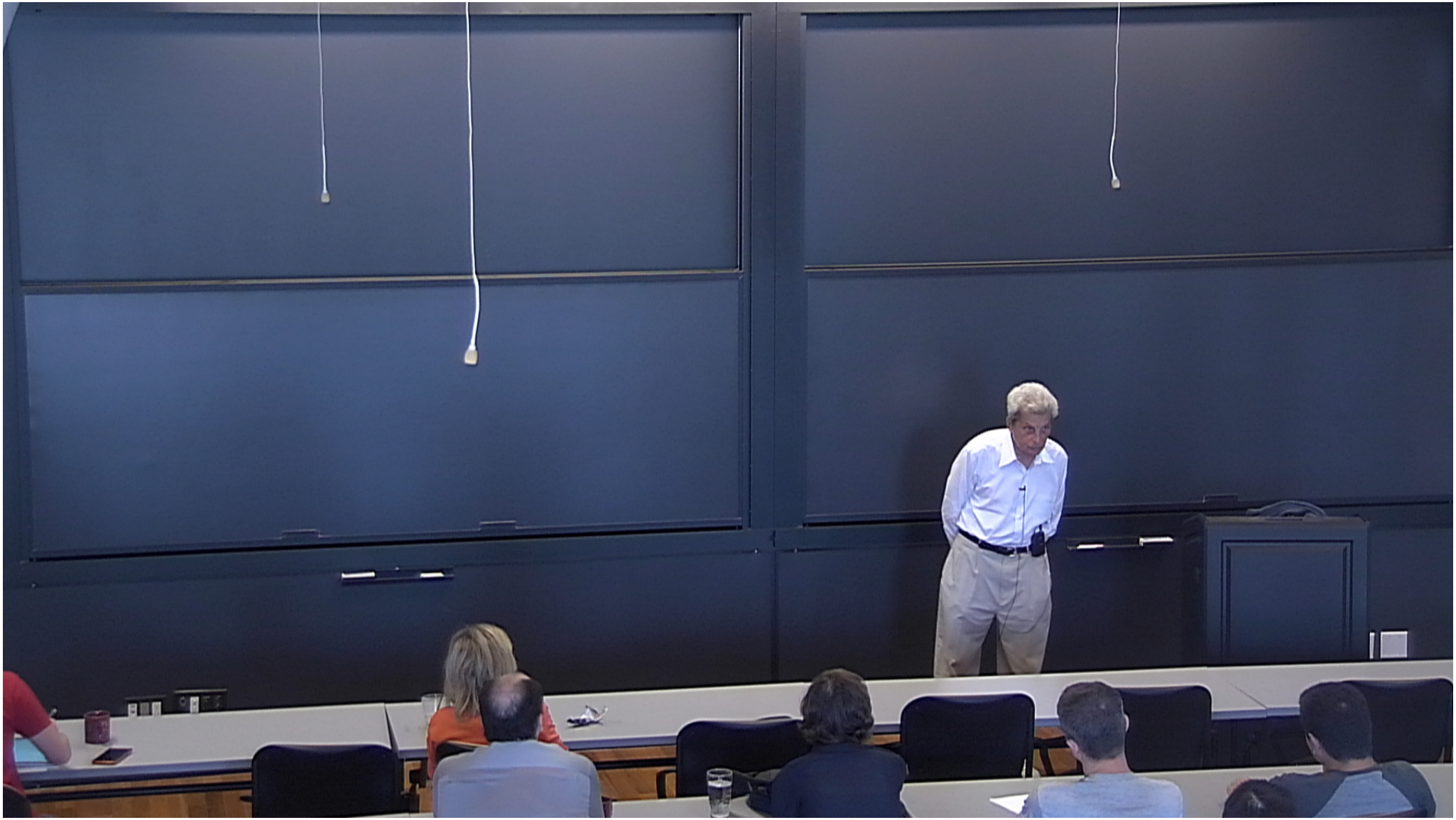
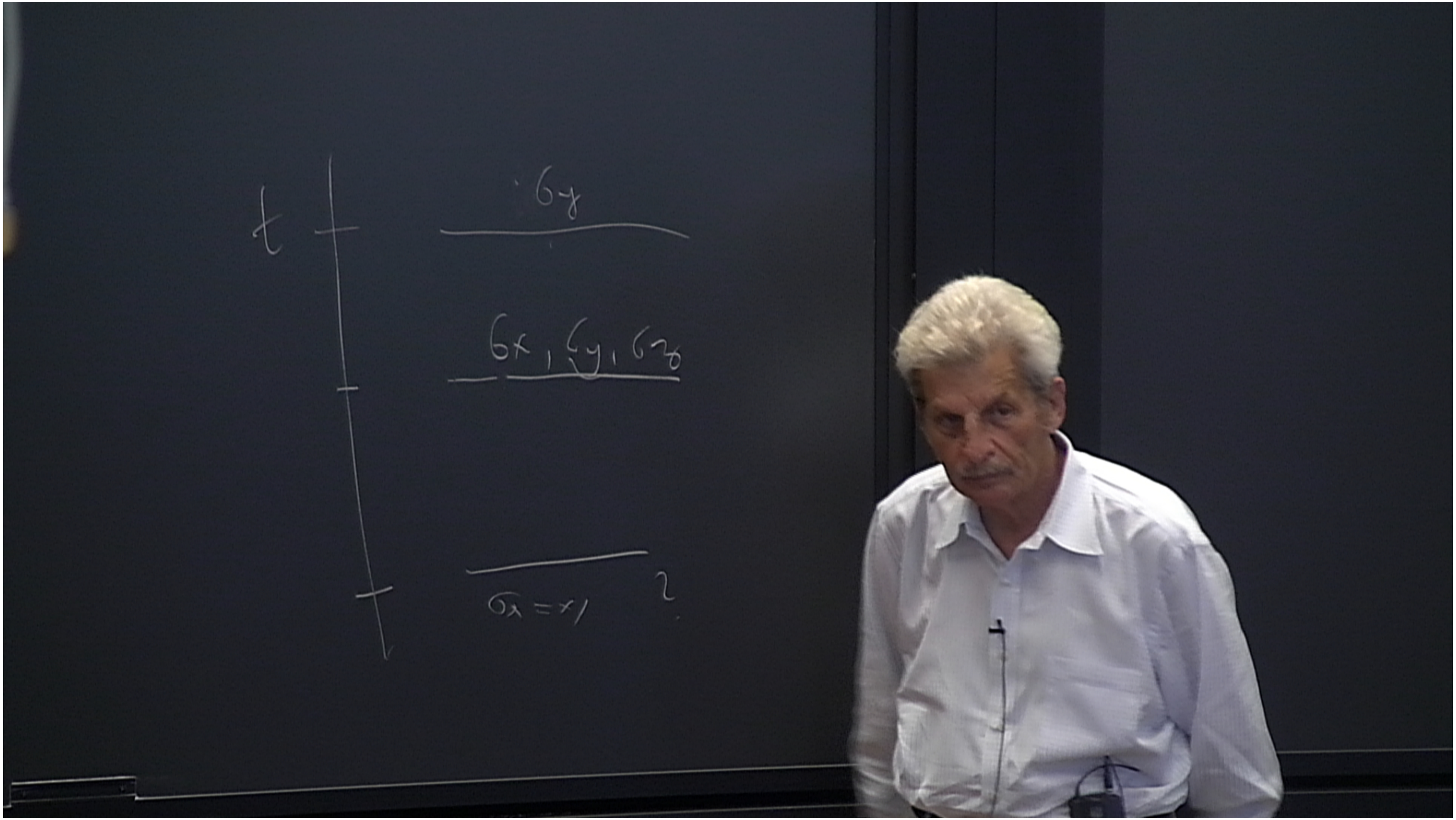
Title: TBA

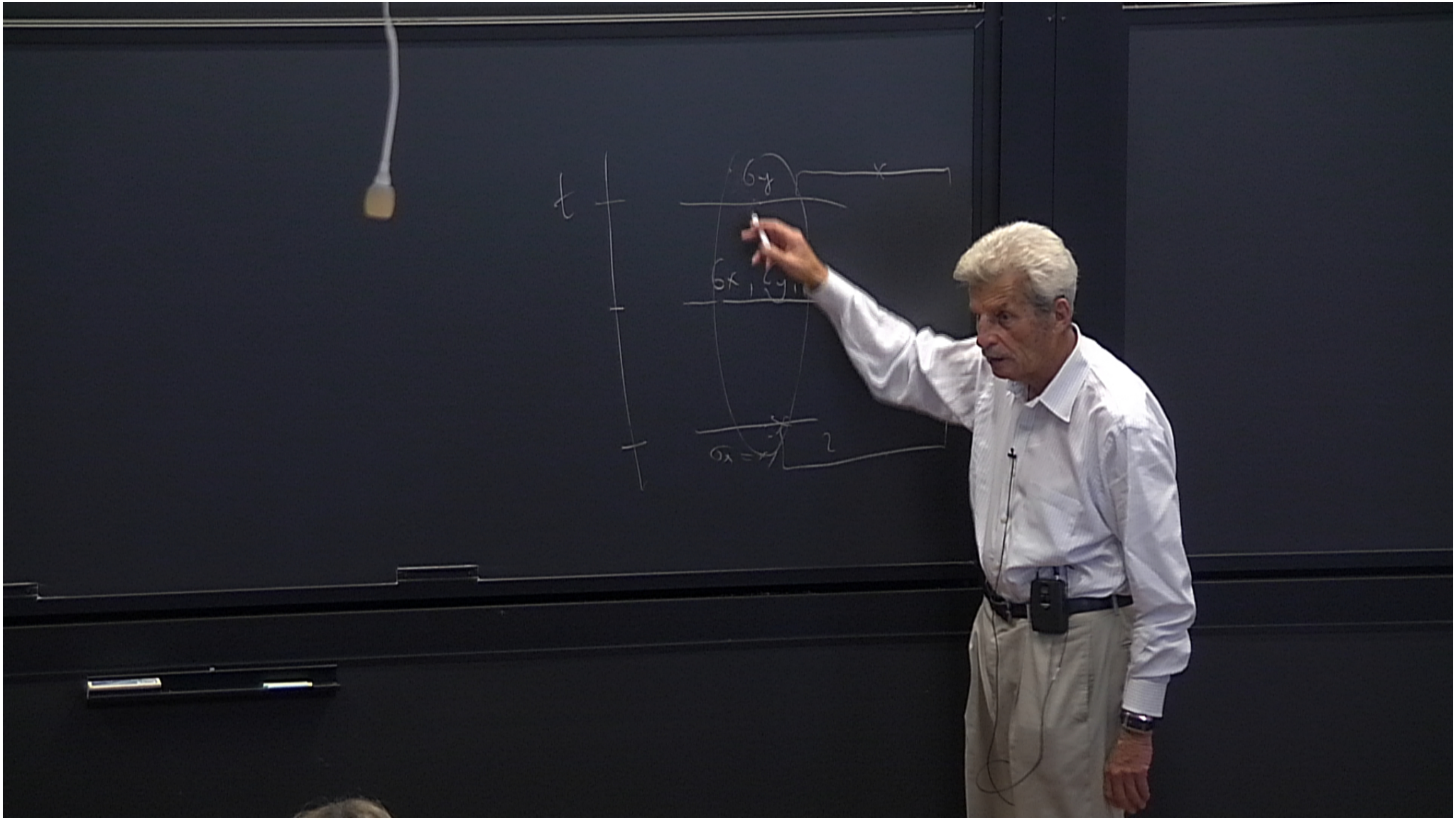
Date: Jun 16, 2016 10:00 AM

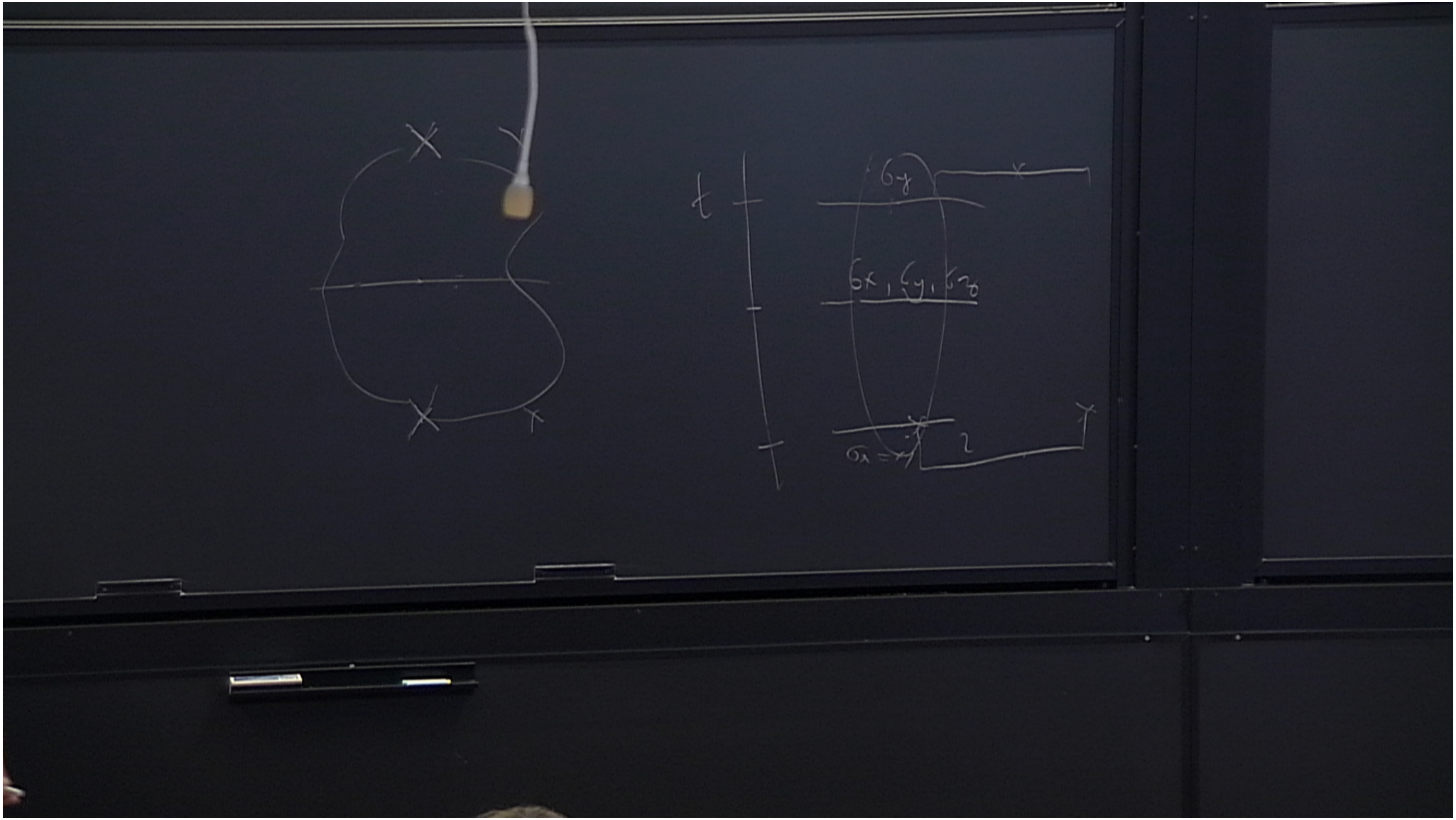
URL: http://pirsa.org/16060087

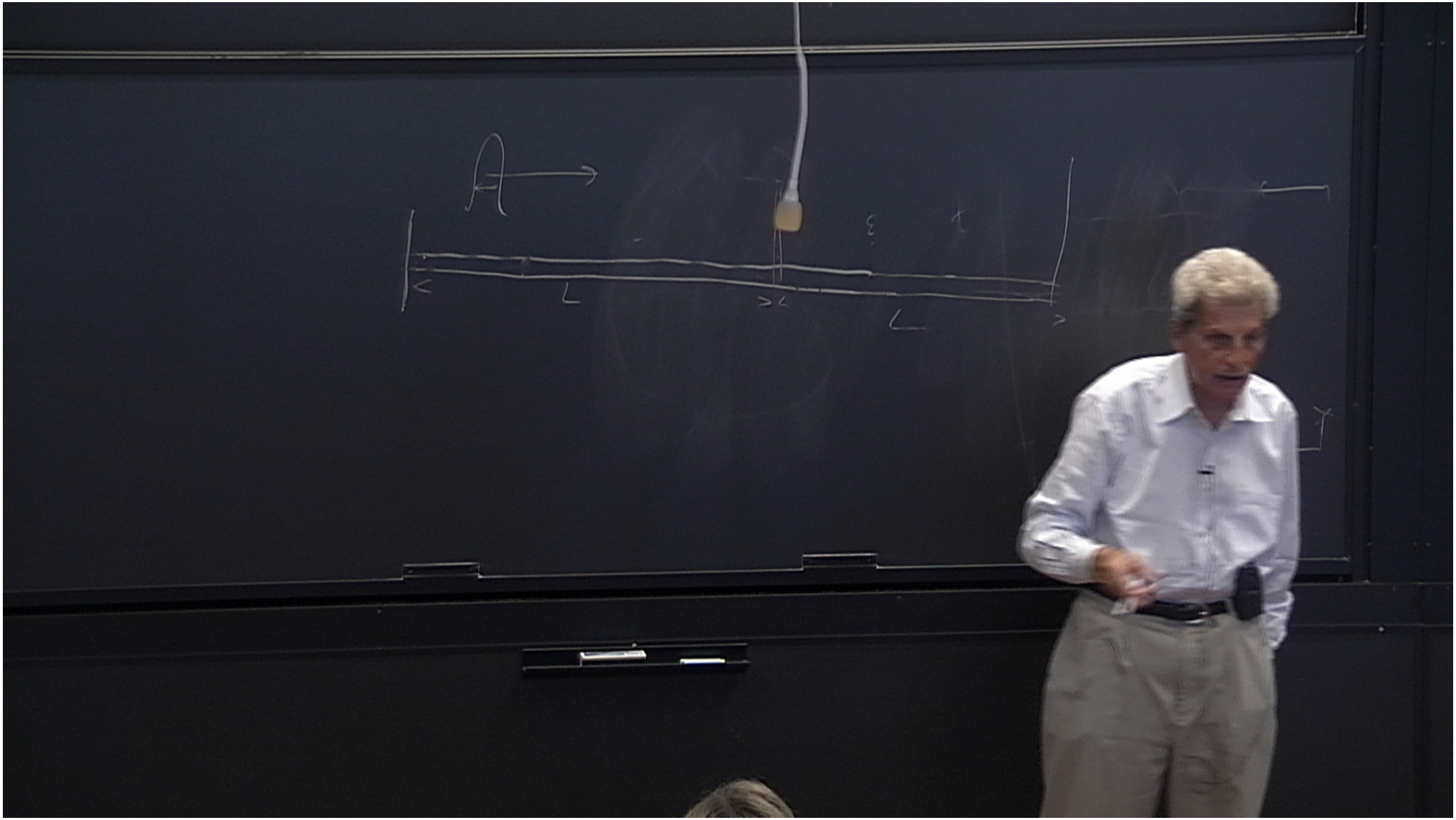
Abstract:

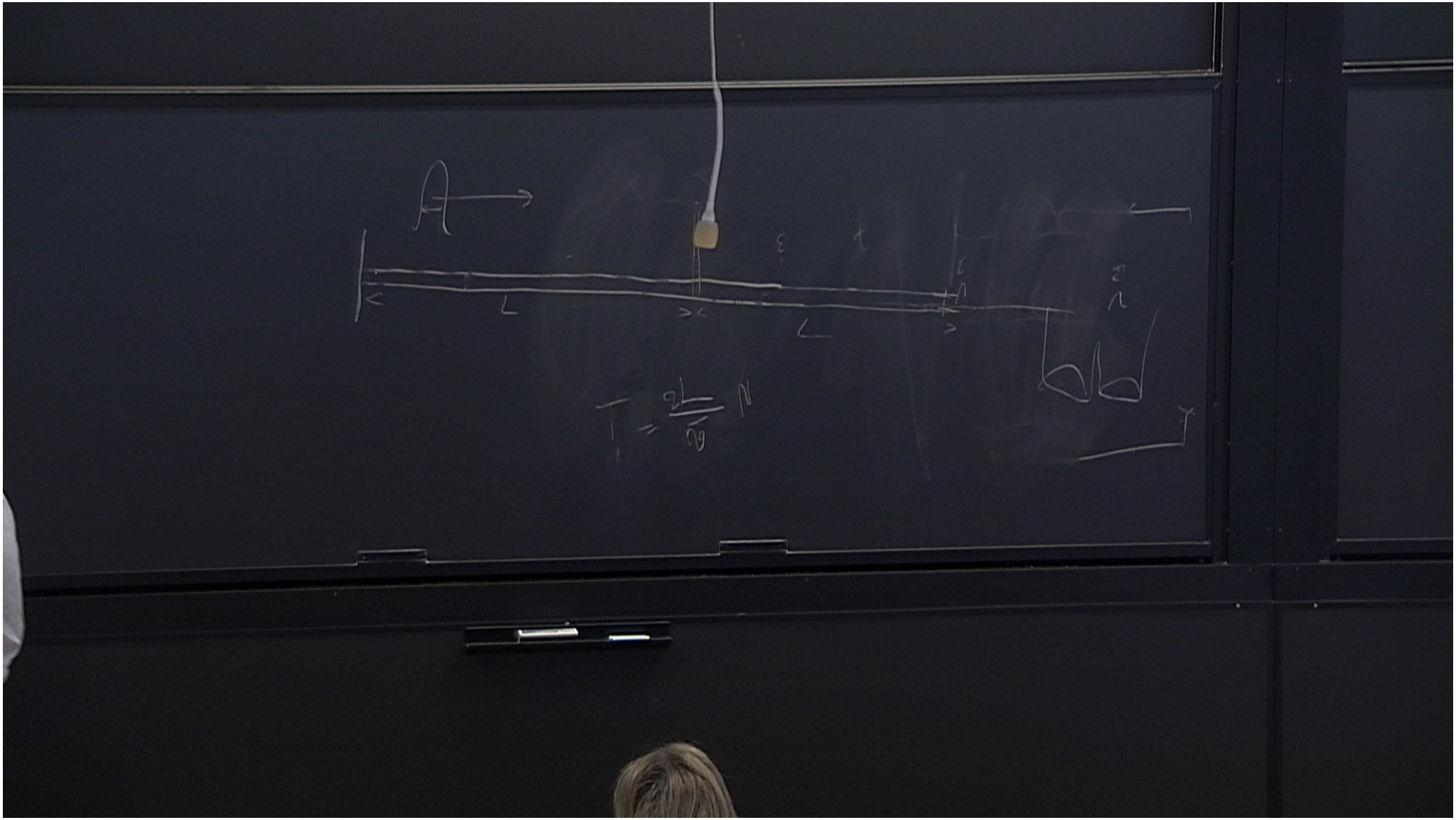


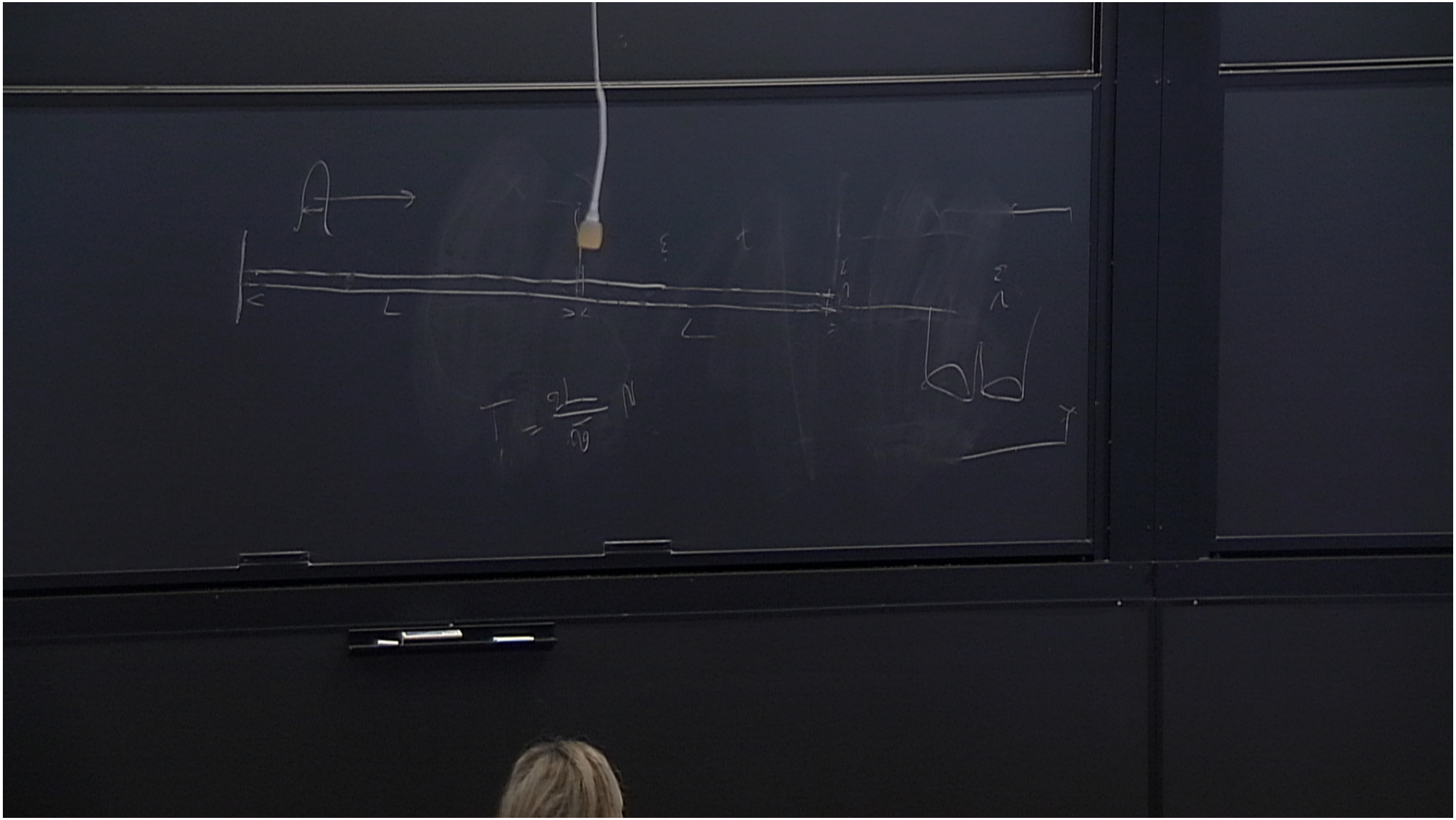

t
σ_y
$\sigma_x, \sigma_y, \sigma_z$
$\sigma_x = x_1$
2

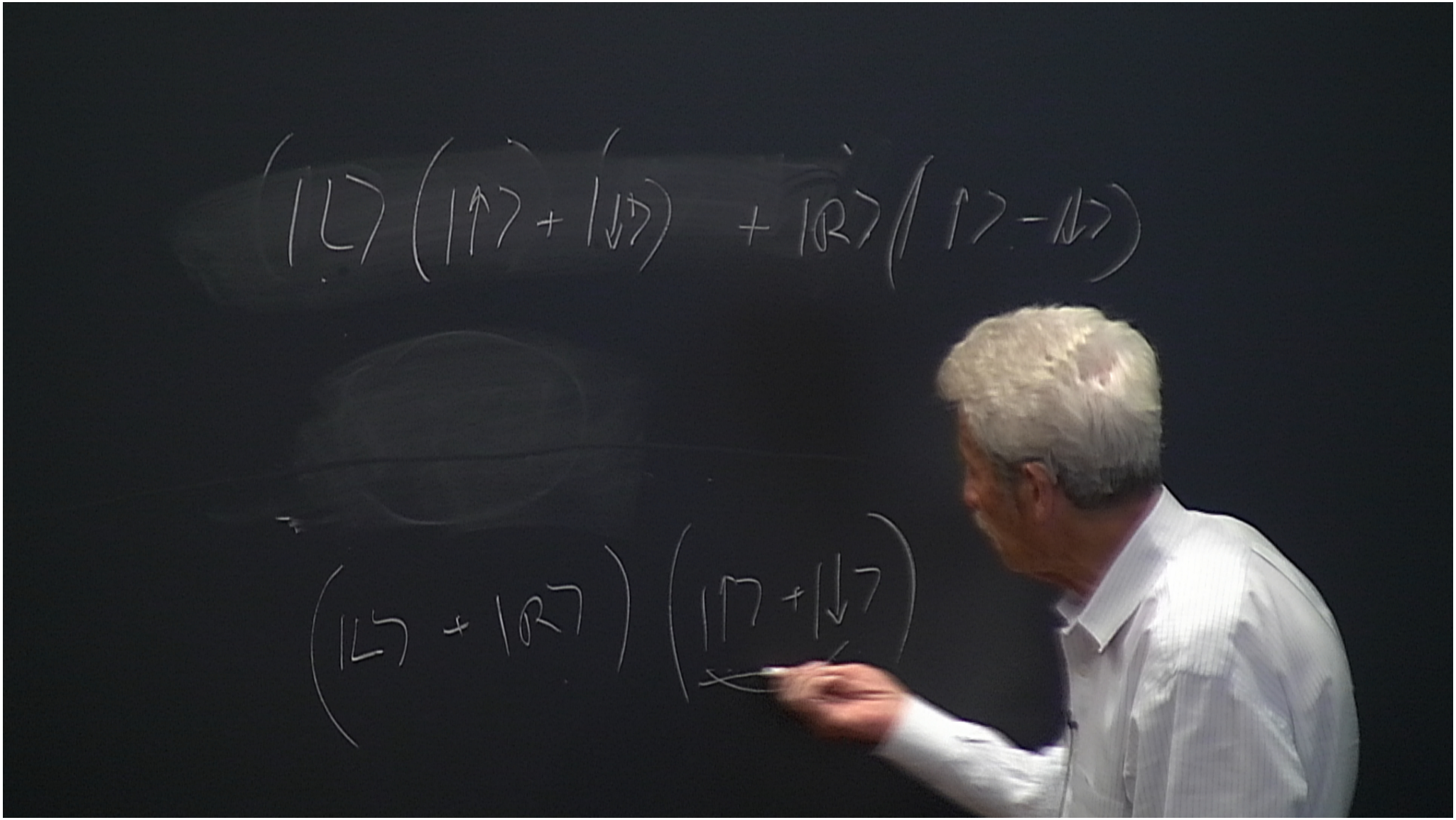

t
x

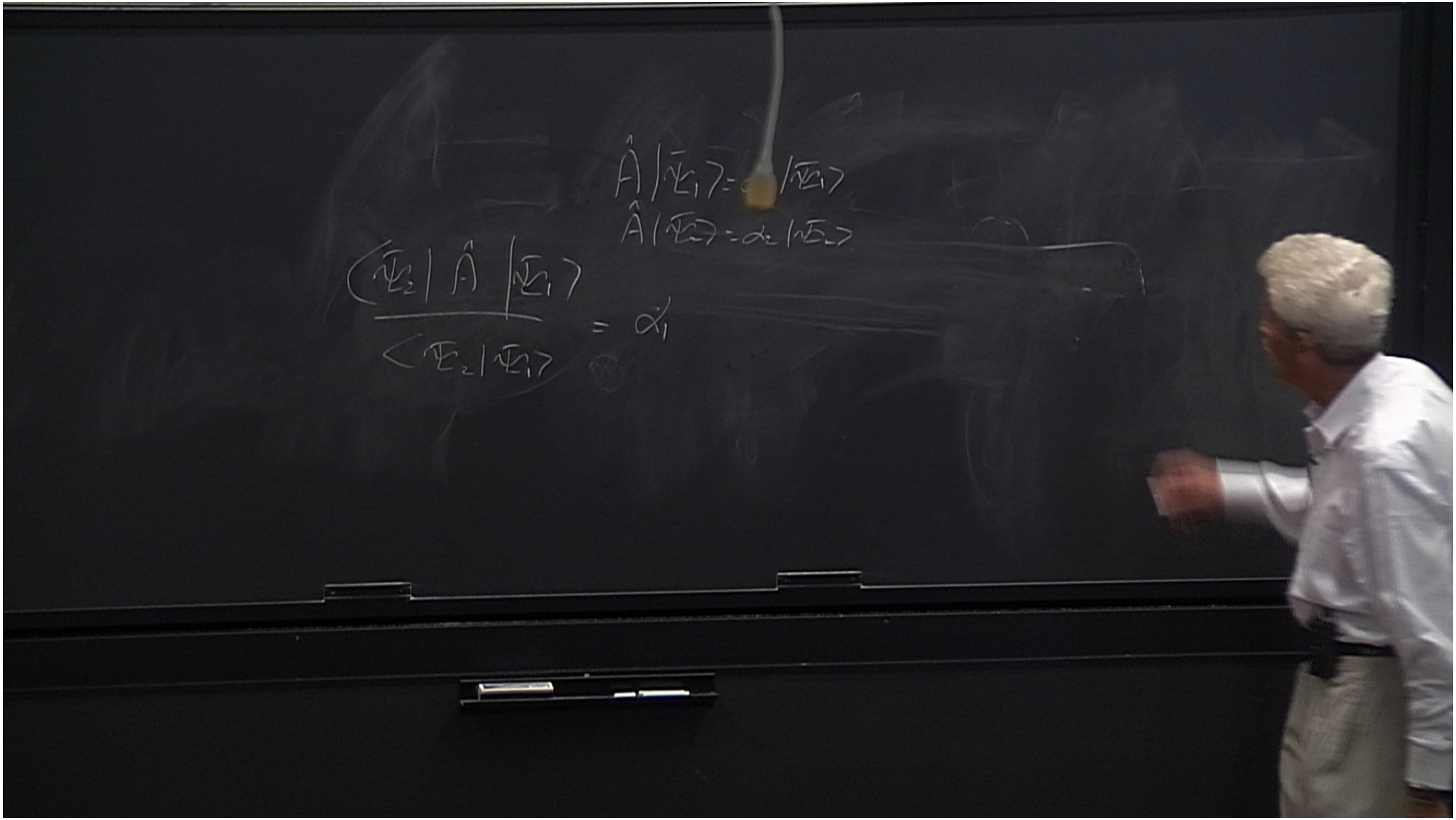

t
$\sigma_x, \sigma_y, \sigma_z$
2

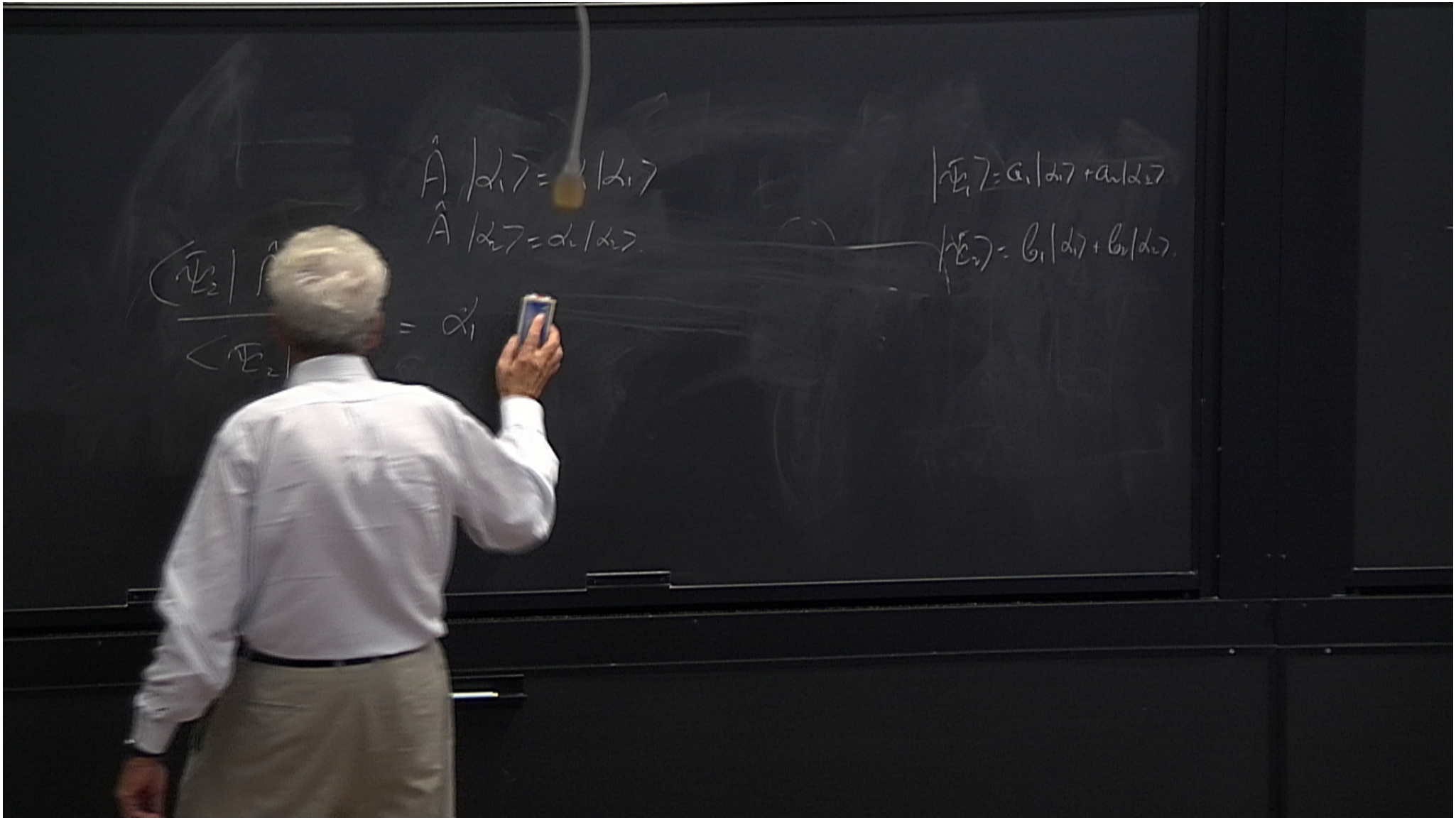

A
L
L

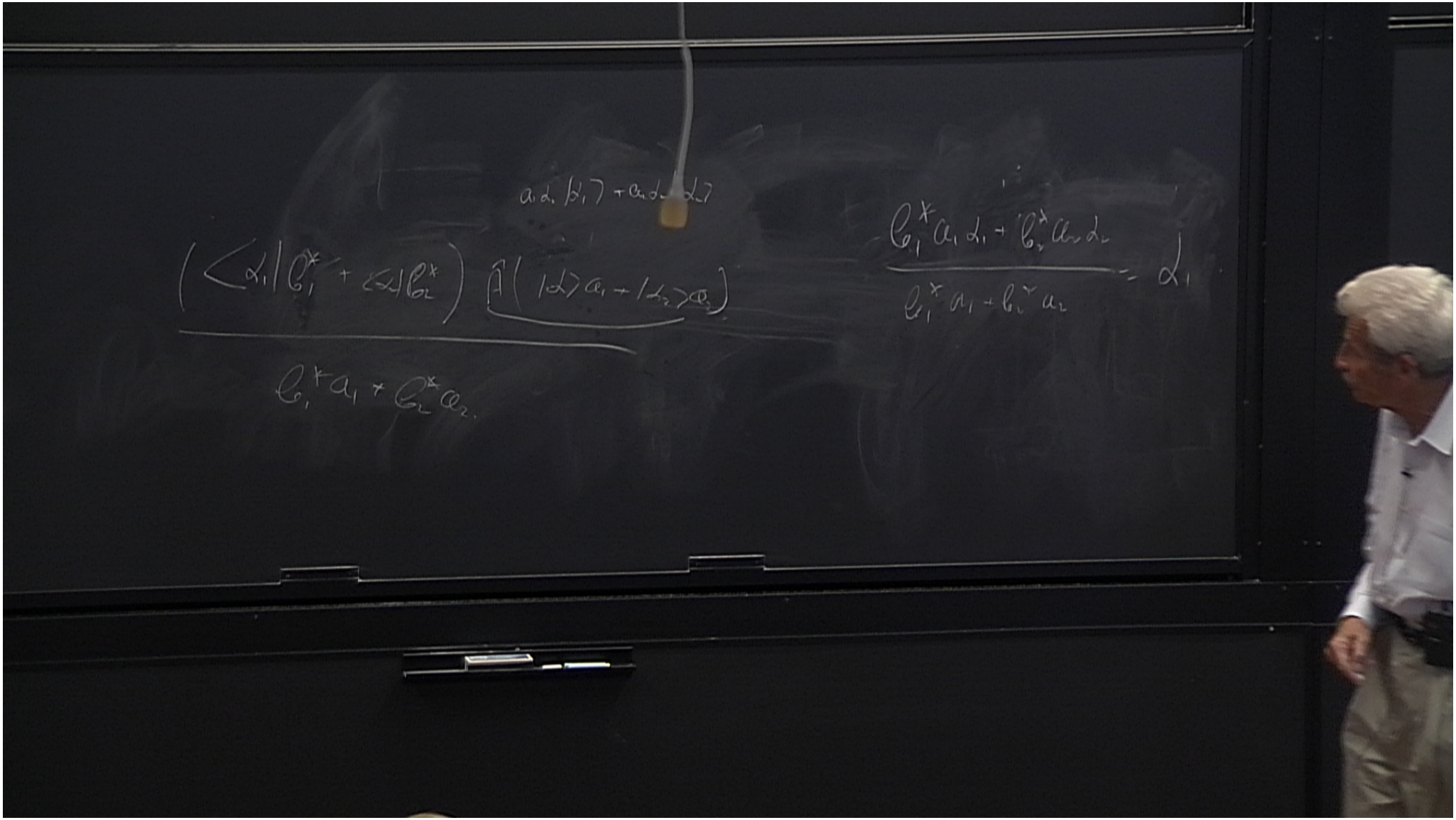

A
L
L
$T = \frac{2L}{n} N$

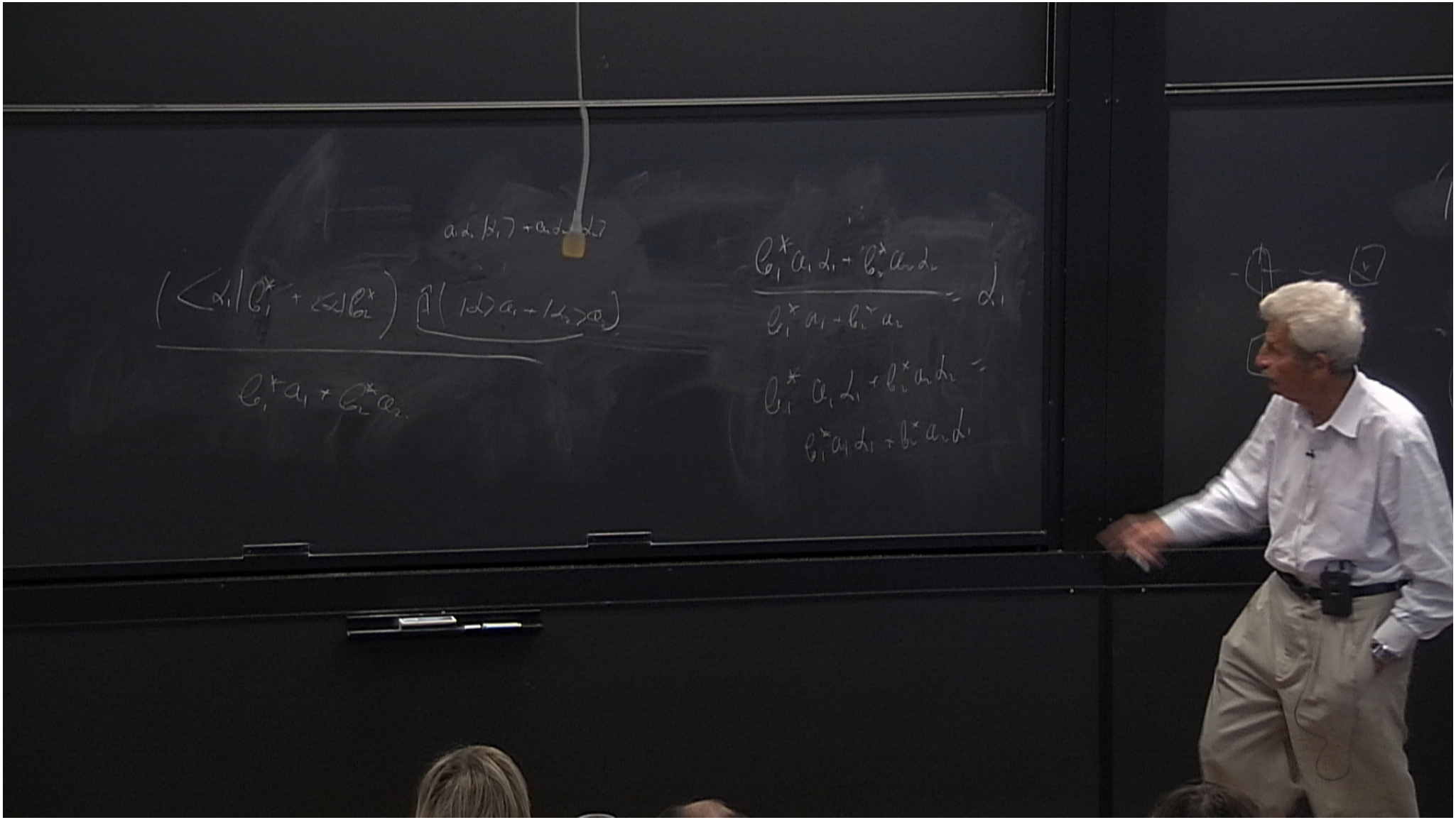

A
L
L
T = 2L/v N

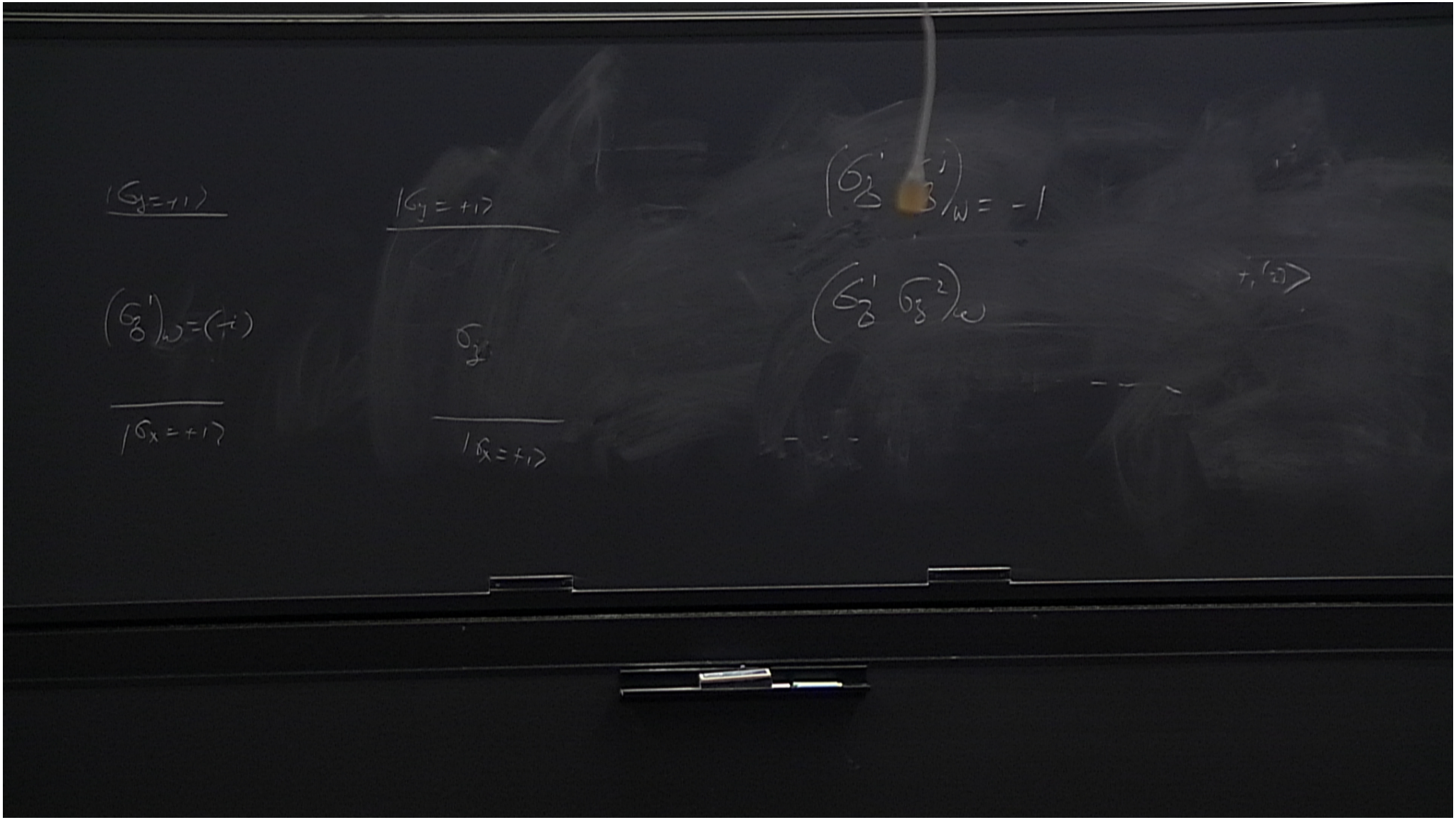

|L⟩(|↑⟩+|↓⟩) + |R⟩(|↑⟩−|↓⟩)
(|L⟩ + |R⟩)(|↑⟩+|↓⟩)

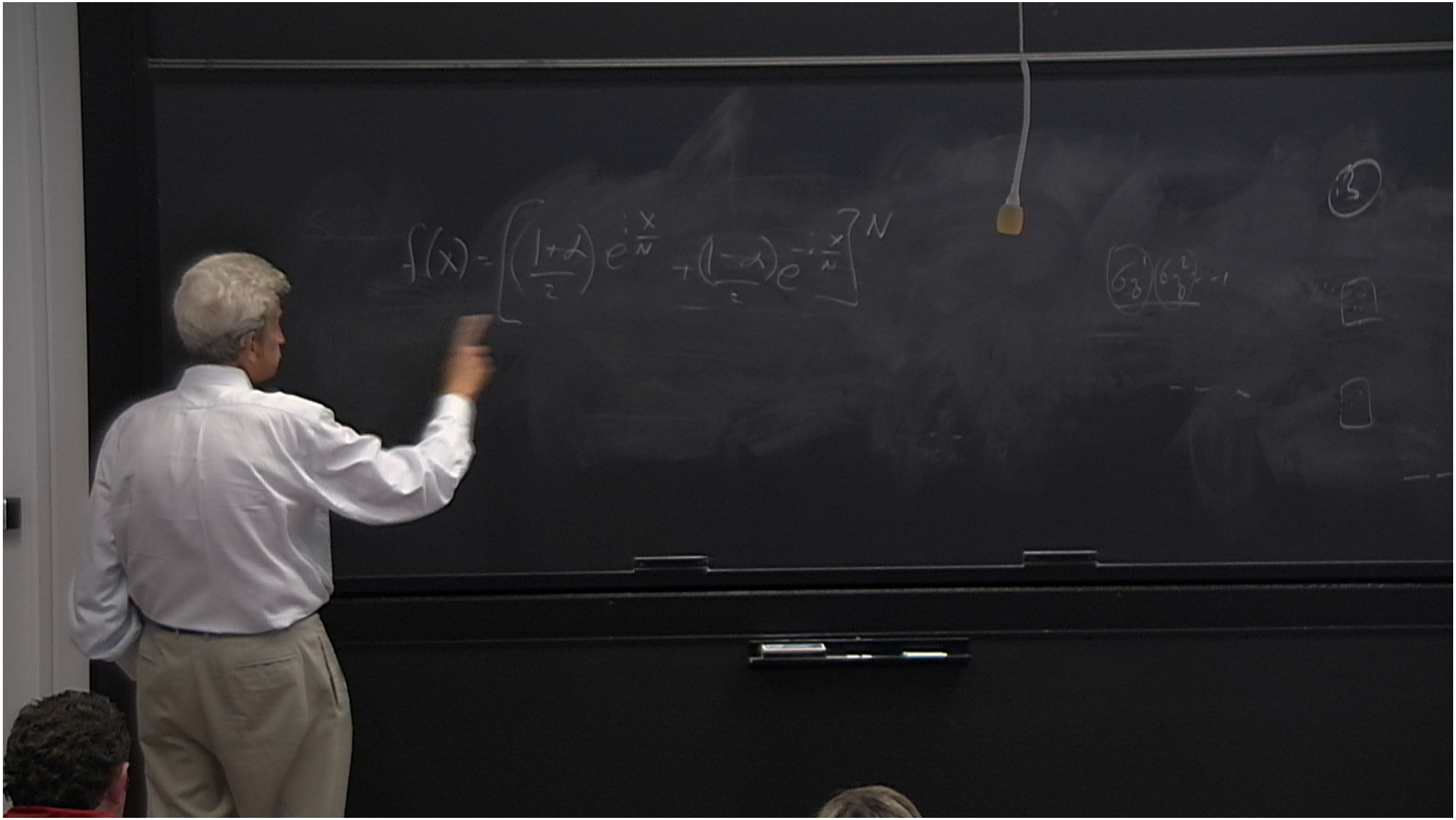

$\hat{A}|\bar{v}_1\rangle = \alpha_1|\bar{v}_1\rangle$
$\hat{A}|\bar{v}_2\rangle = \alpha_2|\bar{v}_2\rangle$
$\frac{\langle\bar{v}_2|\hat{A}|\bar{v}_1\rangle}{\langle\bar{v}_2|\bar{v}_1\rangle} = \alpha_1$

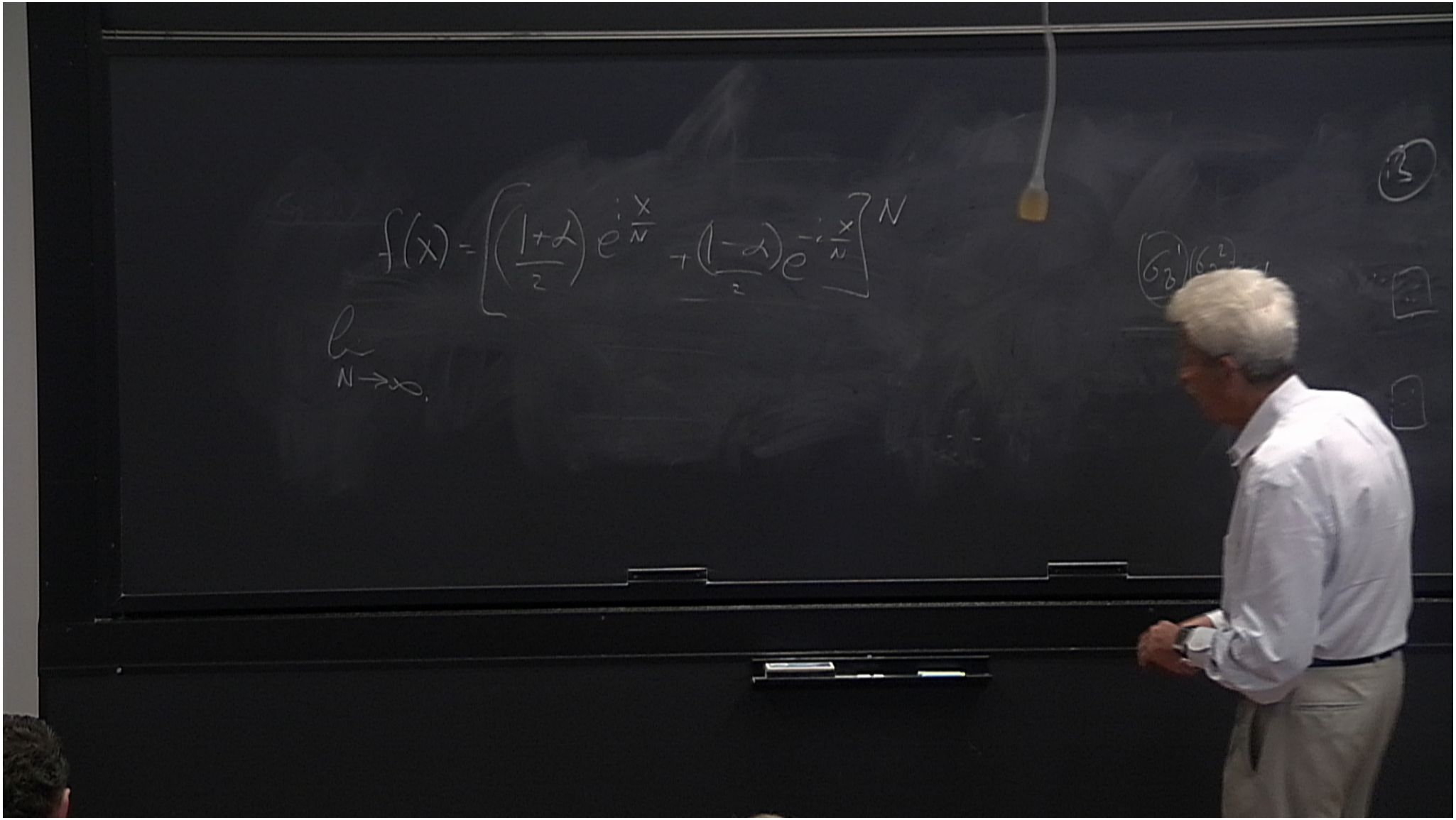

$\hat{A}|a_1\rangle = a_1|a_1\rangle$
$\hat{A}|a_2\rangle = a_2|a_2\rangle$.
$|E_1\rangle = c_1|a_1\rangle + c_2|a_2\rangle$
$|E_2\rangle = d_1|a_1\rangle + d_2|a_2\rangle$.
$\langle E_2|\hat{A}$
$\overline{\langle E_2|}$
$= a_1$

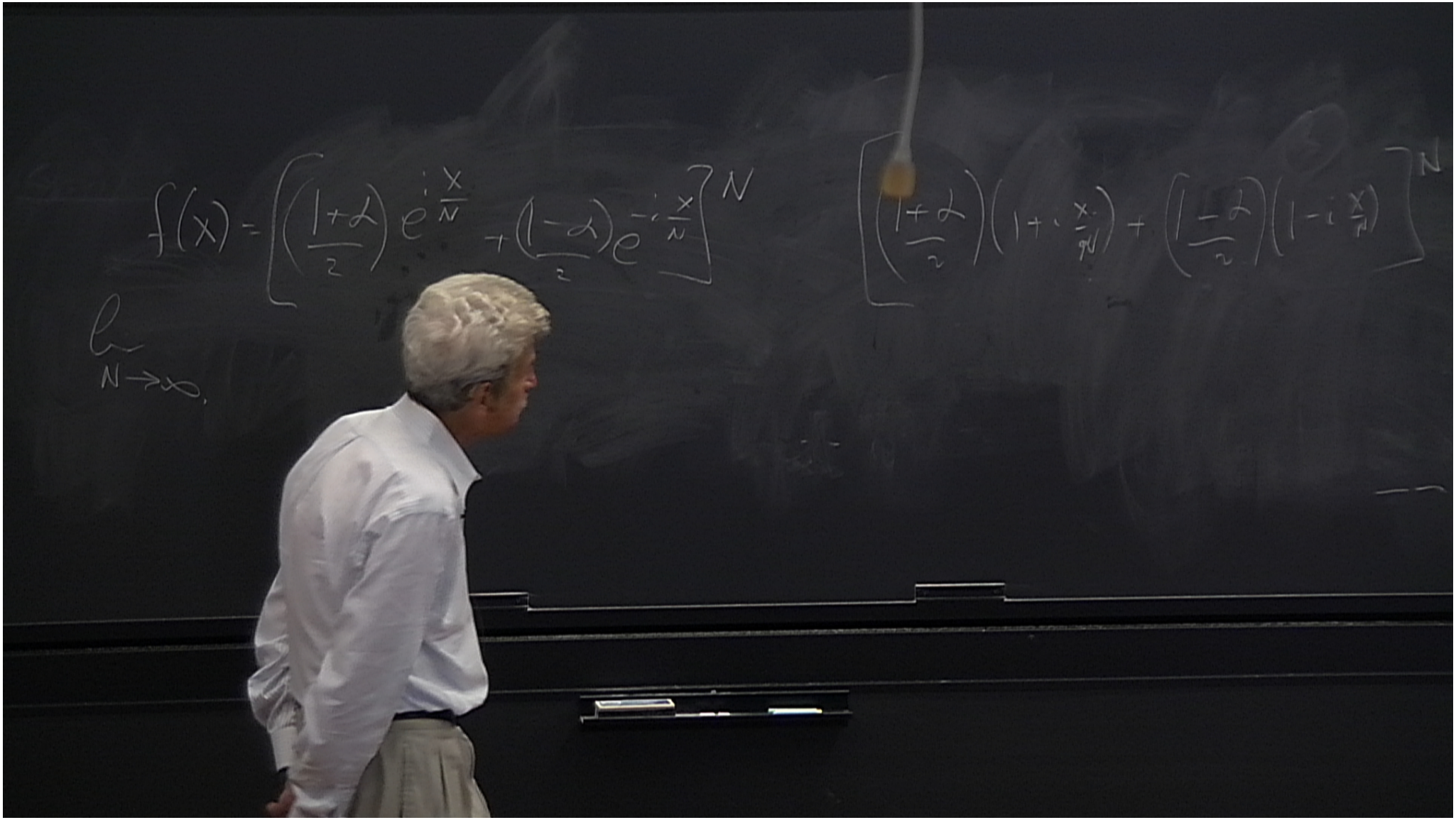


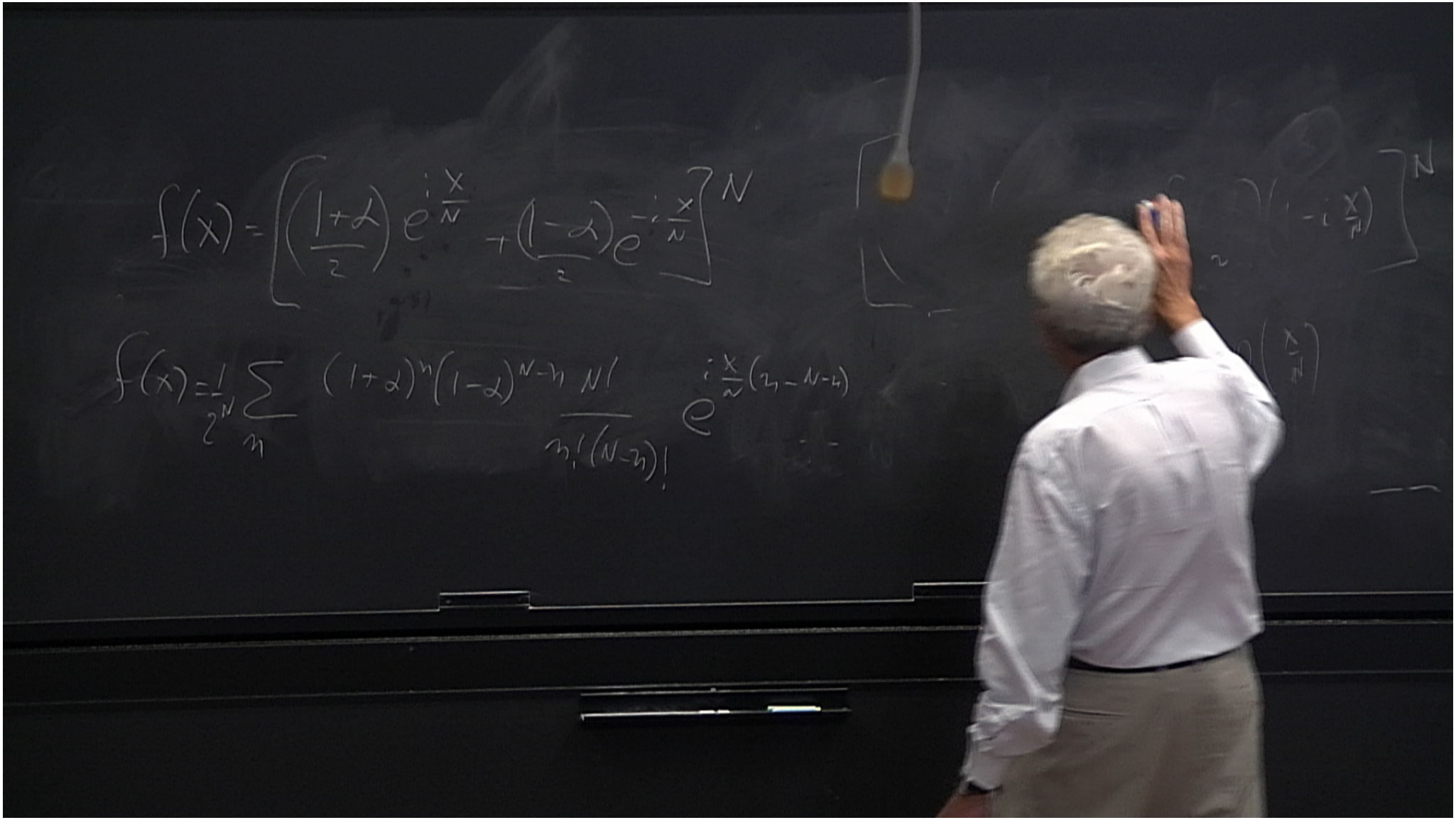


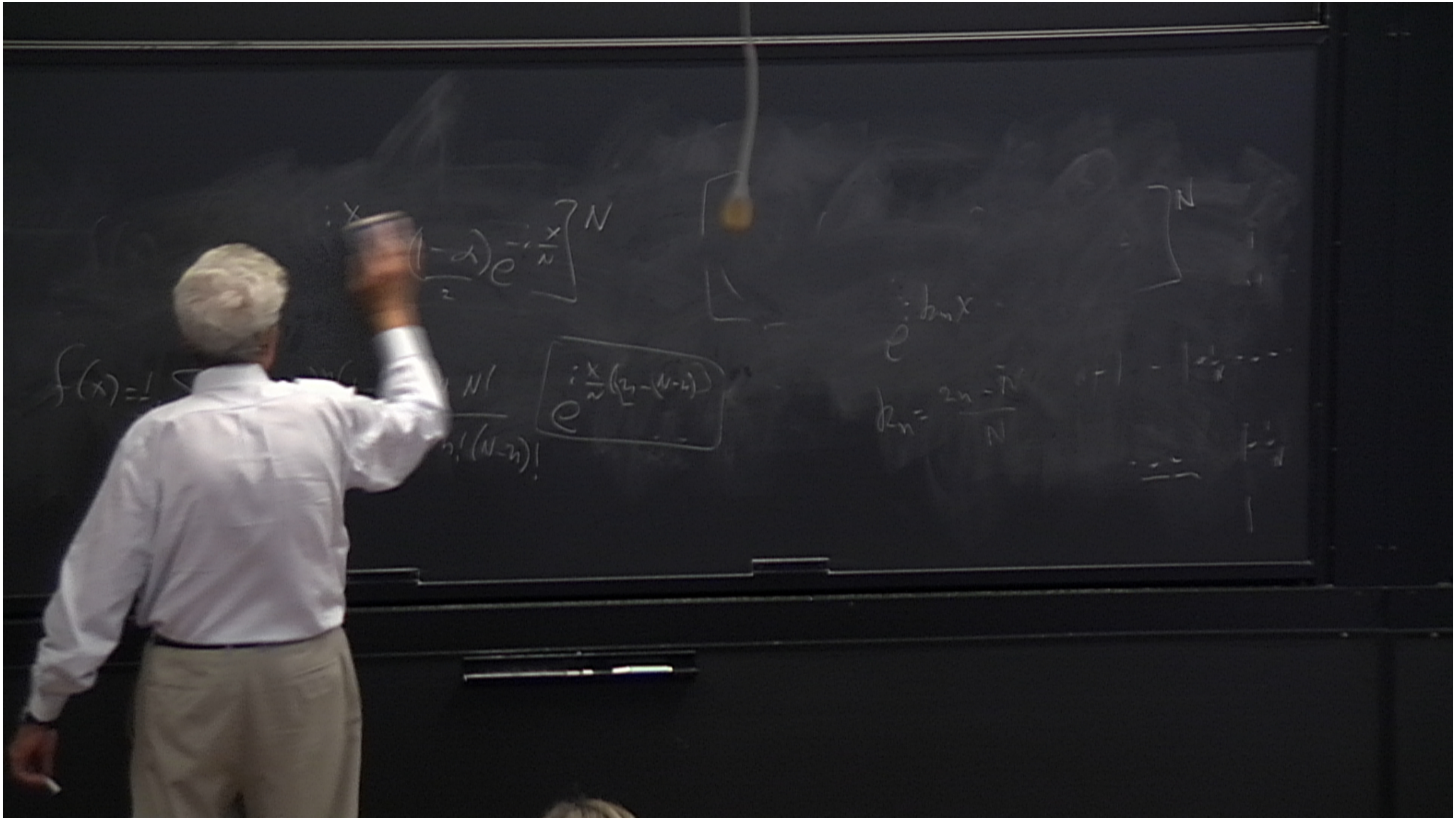

$|\sigma_y = +1\rangle$
$|\sigma_y = +1\rangle$
$(\sigma_B^1 \sigma_B^2)_W = -1$
$(\sigma_B^1)_W = (+1)$
σ_y
$|\sigma_x = +1\rangle$
$|\sigma_x = +1\rangle$

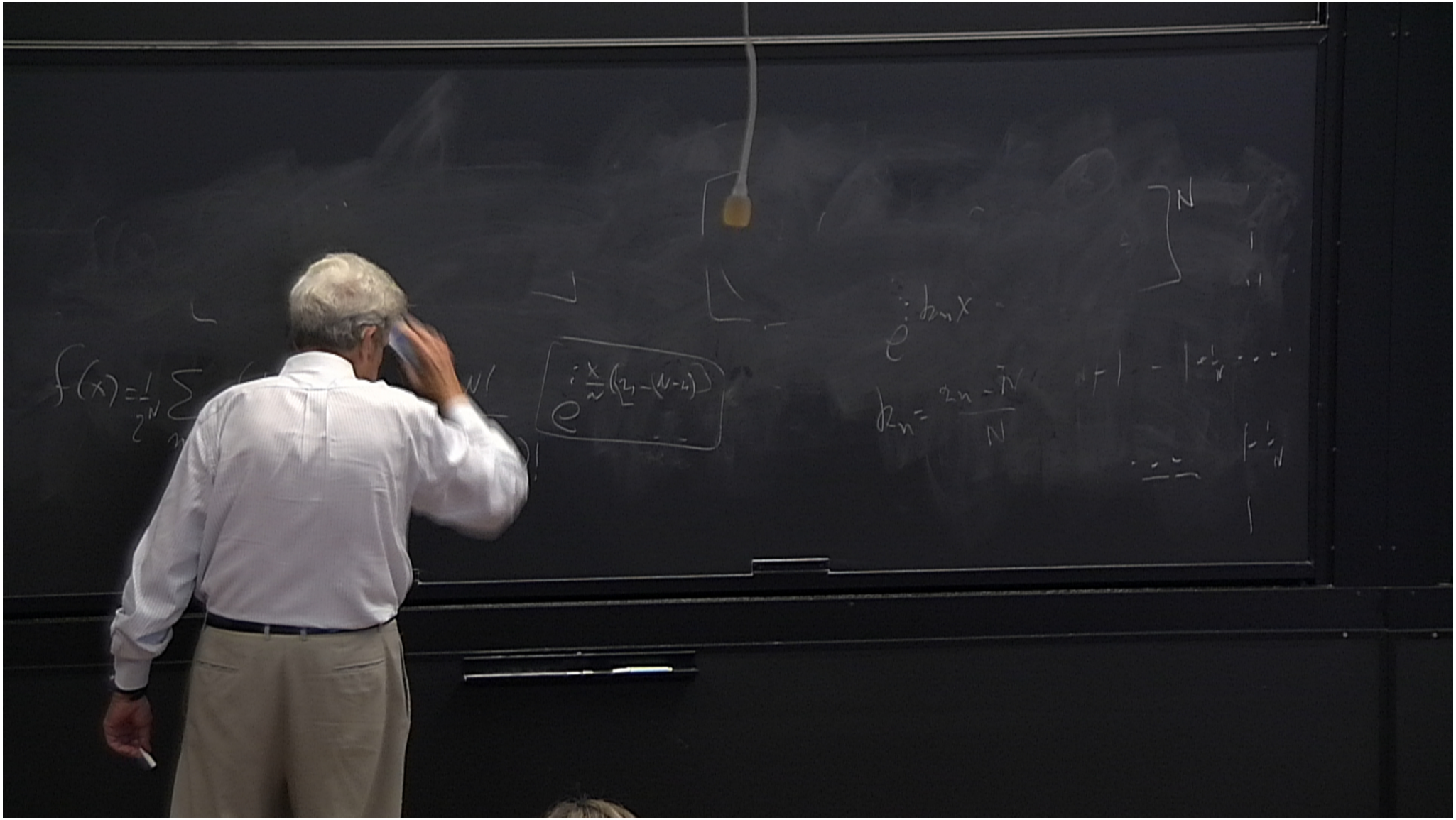

$f(x) = \left[\left(\frac{1+\alpha}{2}\right)e^{i\frac{x}{N}} + \left(\frac{1-\alpha}{2}\right)e^{-i\frac{x}{N}}\right]^N$

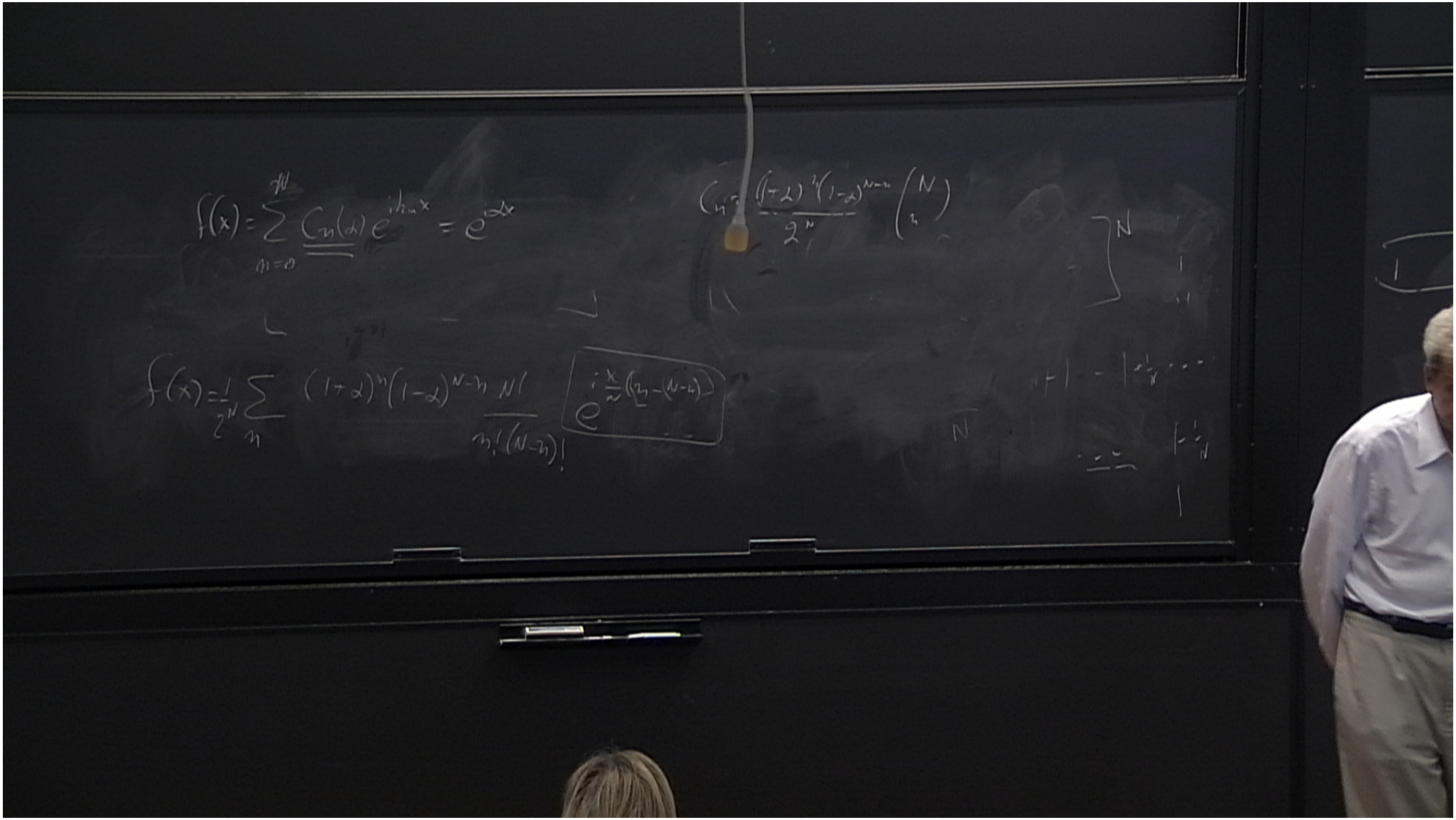

$f(x) = \left[\left(\frac{1+\alpha}{2}\right)e^{i\frac{x}{N}} + \left(\frac{1-\alpha}{2}\right)e^{-i\frac{x}{N}}\right]^N$
$\lim_{N\to\infty}$

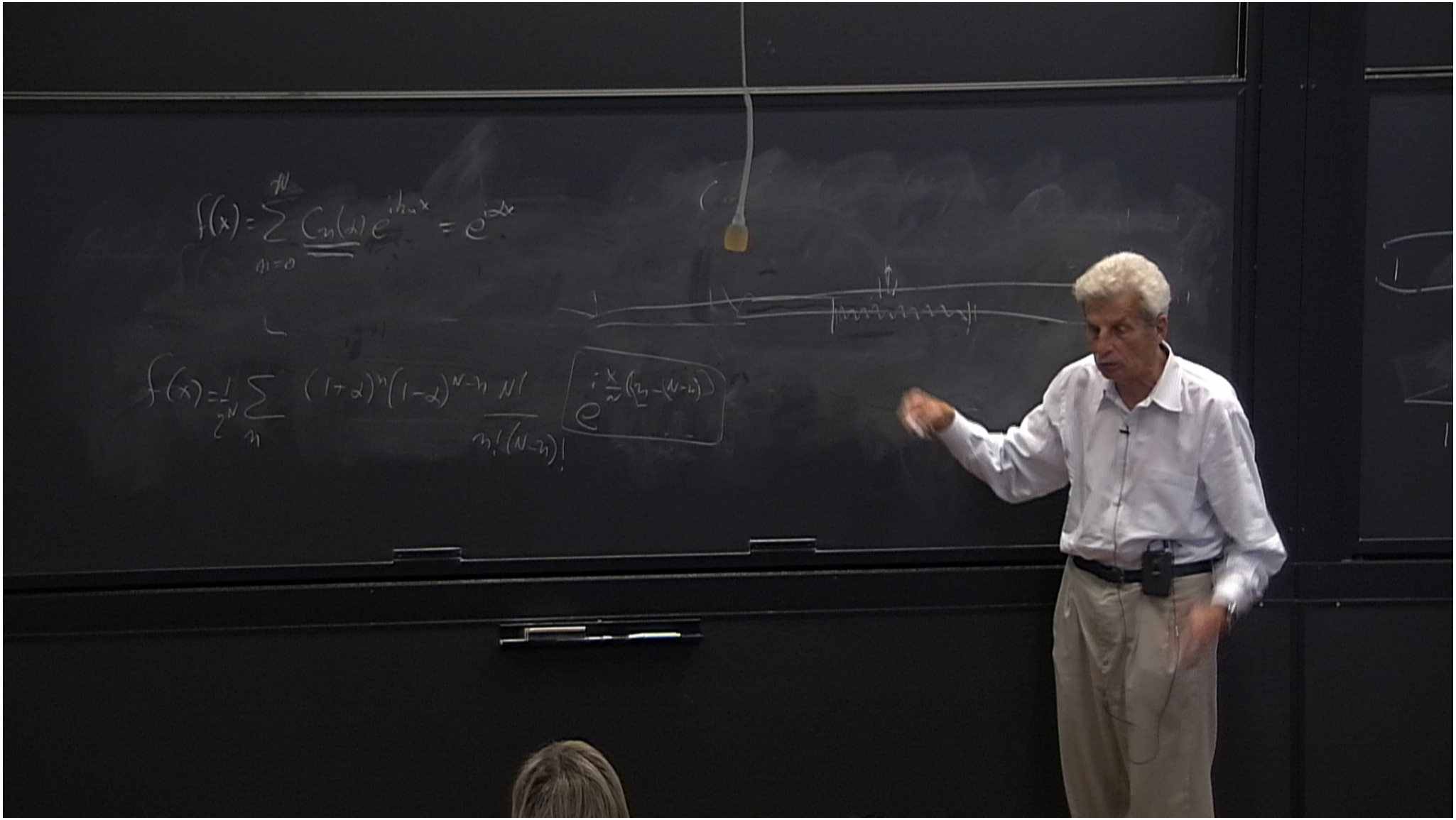

$f(x) = \left[\left(\frac{1+\alpha}{2}\right)e^{i\frac{x}{N}} + \left(\frac{1-\alpha}{2}\right)e^{-i\frac{x}{N}}\right]^N$
$\left[\left(\frac{1+\alpha}{2}\right)\left(1+i\frac{x}{N}\right) + \left(\frac{1-\alpha}{2}\right)\left(1-i\frac{x}{N}\right)\right]^N$
$N \to \infty$

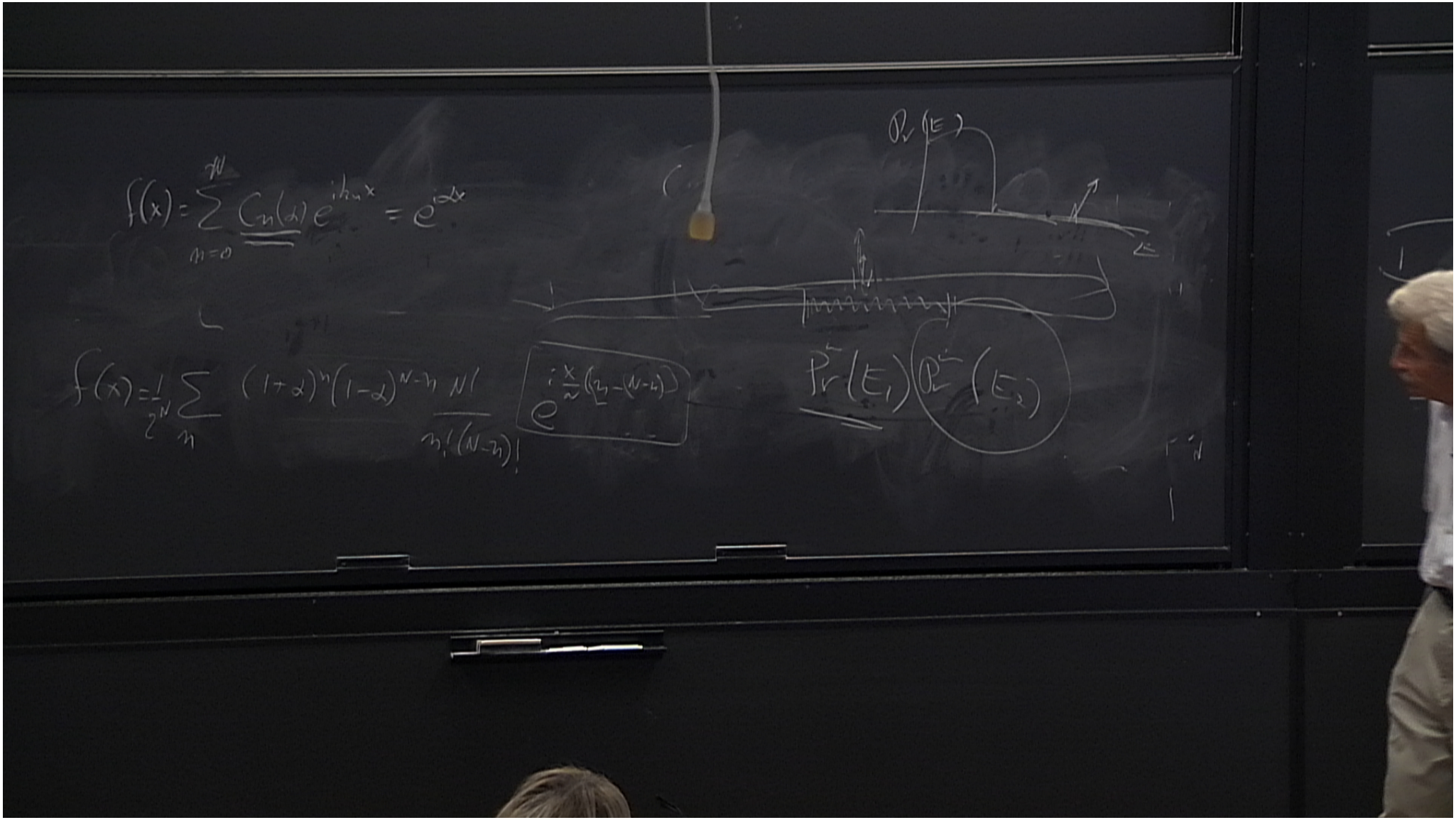

$f(x) = \left[\left(\frac{1+\alpha}{2}\right)e^{i\frac{x}{N}} + \left(\frac{1-\alpha}{2}\right)e^{-i\frac{x}{N}}\right]^N$
$f(x) = \frac{1}{2^N}\sum_n (1+\alpha)^n (1-\alpha)^{N-n} \frac{N!}{n!(N-n)!} e^{i\frac{x}{N}(2n-N-4)}$

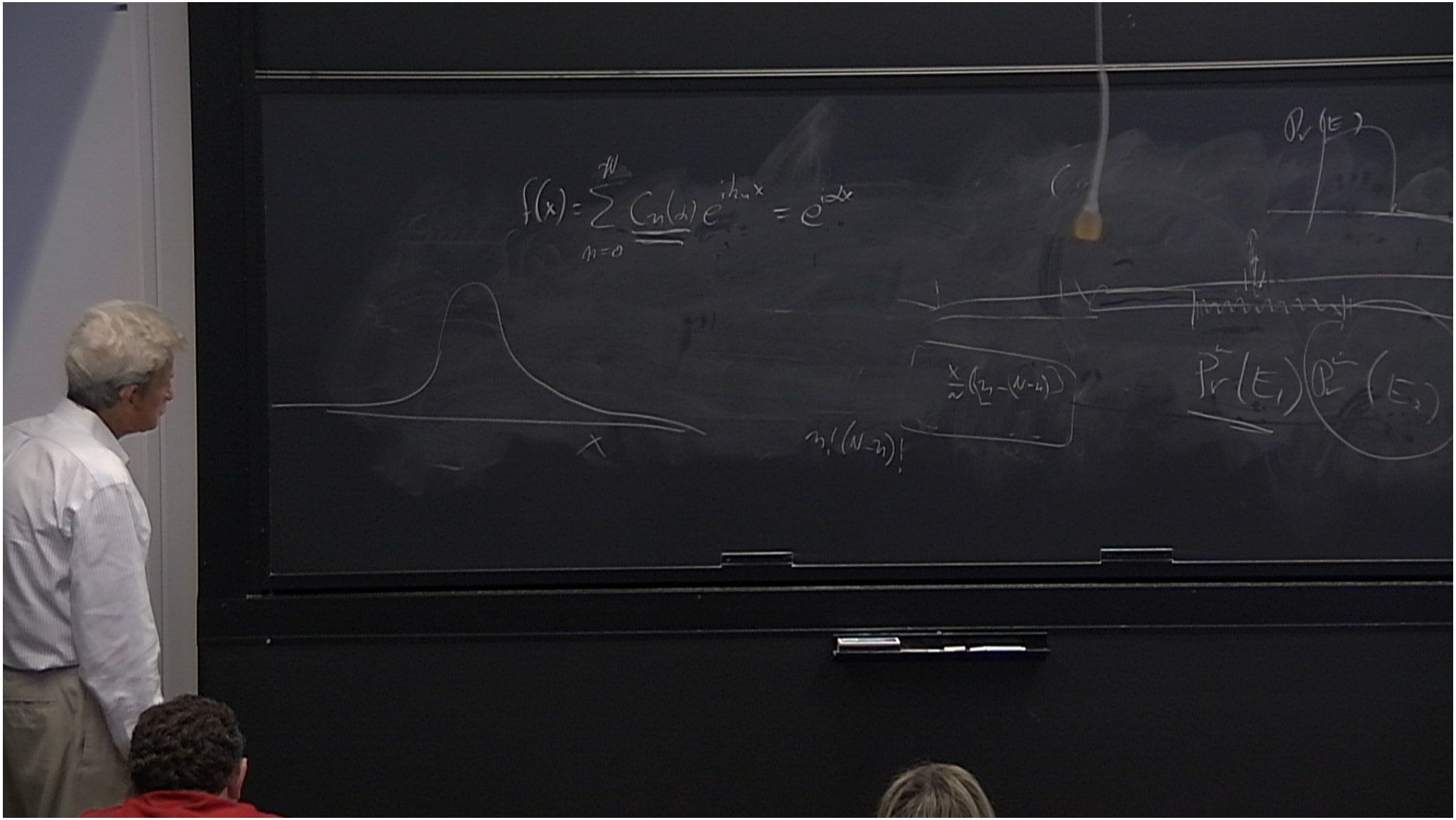



N
$e^{ik_n x}$
$k_n = \frac{2n - N}{N}$


$f(x) = \sum_{n=0}^{N} C_n(\alpha) e^{ikx} = e^{i\alpha x}$
$C_n = \frac{(1+\alpha)^n (1-\alpha)^{N-n}}{2^N} \binom{N}{n}$
$f(x) = \frac{1}{2^N} \sum_n (1+\alpha)^n (1-\alpha)^{N-n} \frac{N!}{n!(N-n)!}$
$e^{\frac{x}{N}(2n-N)}$


$f(x) = \sum_{n=0}^{N} C_n(\alpha) e^{ikx} = e^{i\Delta x}$
$f(x) = \frac{1}{2^N} \sum_n (1+\alpha)^n (1-\alpha)^{N-n} \frac{N!}{n!(N-n)!}$
$e^{i\frac{x}{2}(2n-N)}$


$f(x) = \sum_{n=0}^{N} C_n(\alpha) e^{ik_n x} = e^{i\alpha x}$
$f(x) = \frac{1}{2^N} \sum_n (1+\alpha)^n (1-\alpha)^{N-n} \frac{N!}{n!(N-n)!}$
$e^{\frac{i}{\hbar}x(p_1-(N-p_1))}$
$P_r(E_1)$
$P_r(E_2)$


$f(x) = \sum_{n=0}^{N} C_n(\alpha) e^{i k_n x} = e^{\alpha x}$
$P_r(E_1)$
$P_r(E_2)$
$n!(N-n)!$