

Title: String Theory and Holography

Date: Jul 24, 2012 10:30 AM

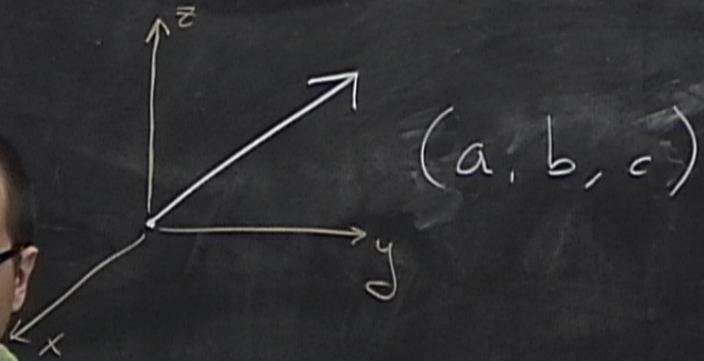
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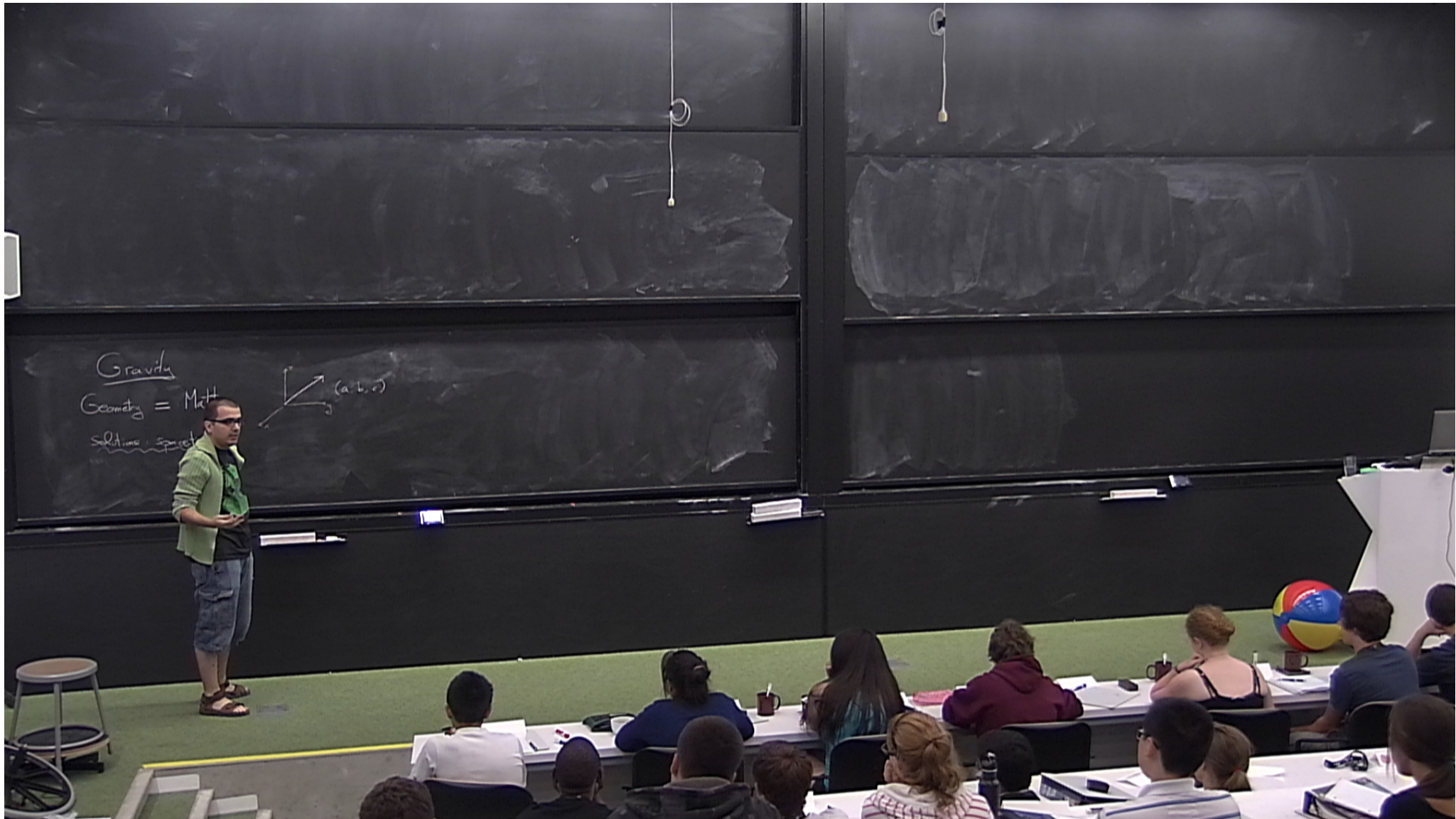
Abstract:

Gravity

Geometry = Matte

Solutions: spacetime

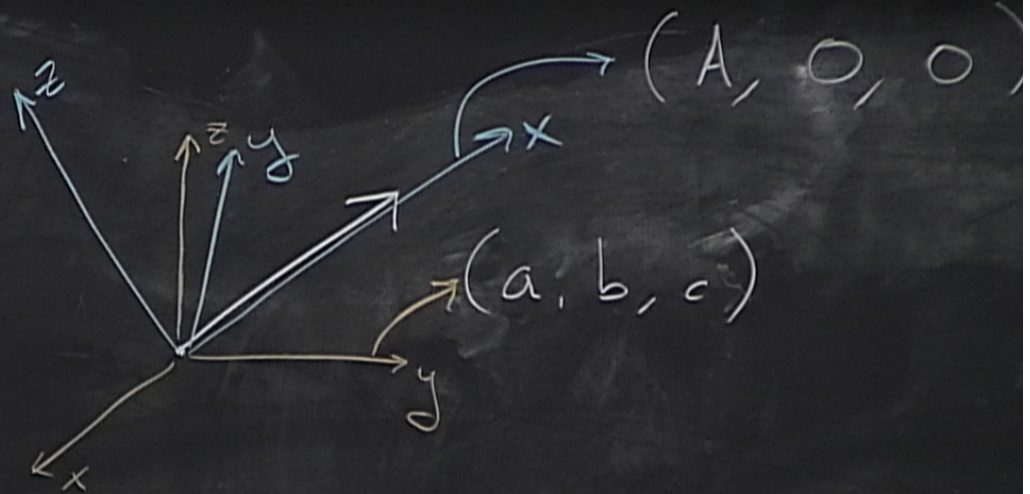


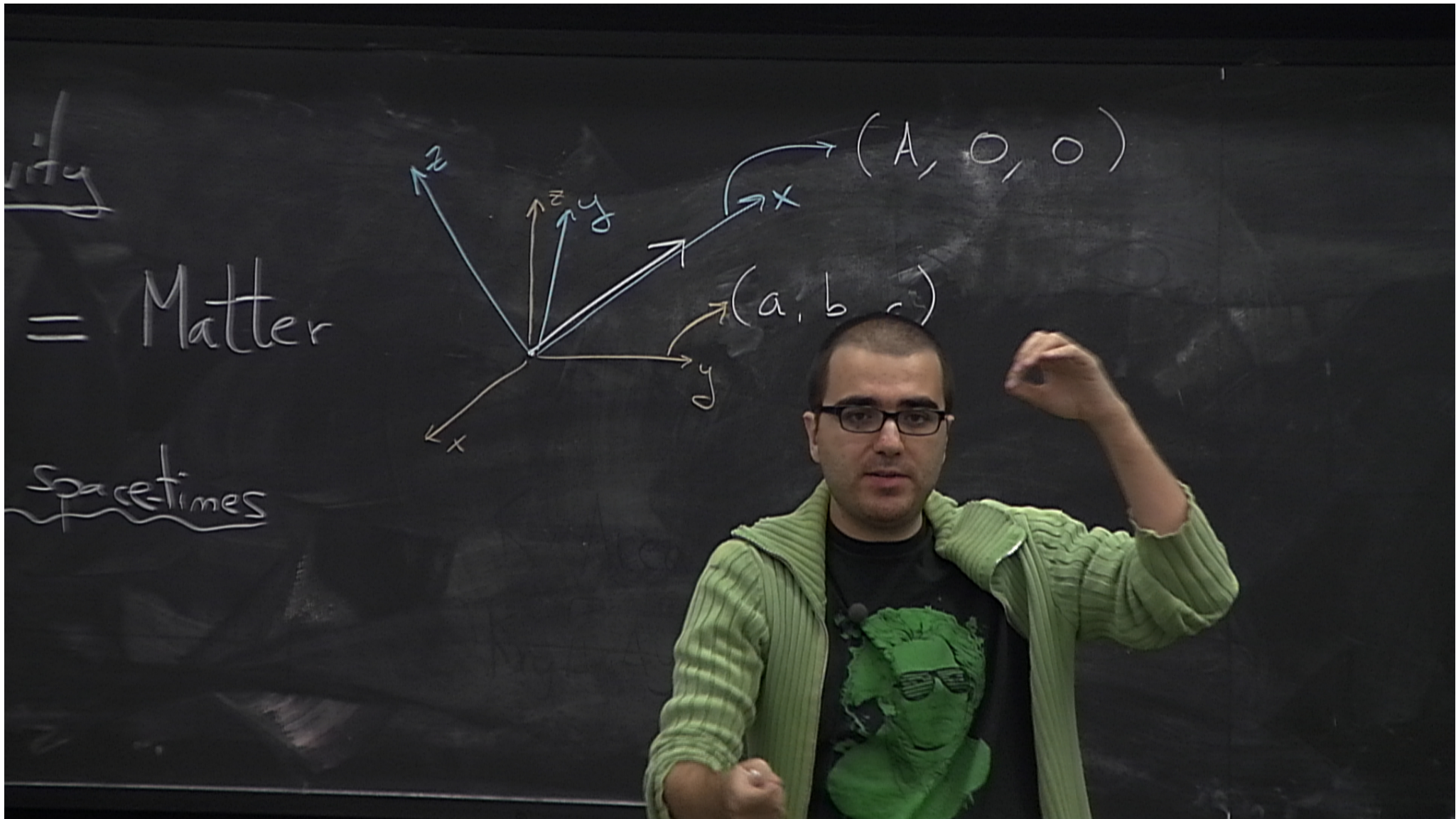


Gravity

Geometry = Matter

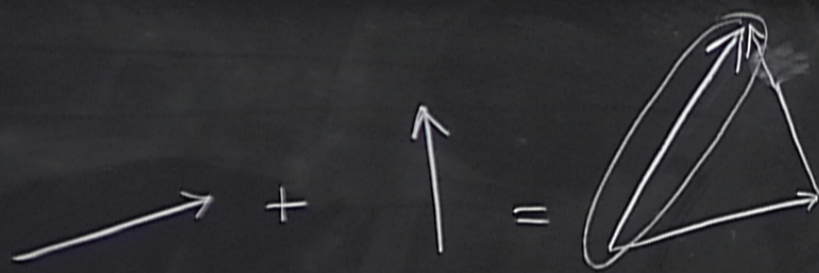
Solutions: spacetimes



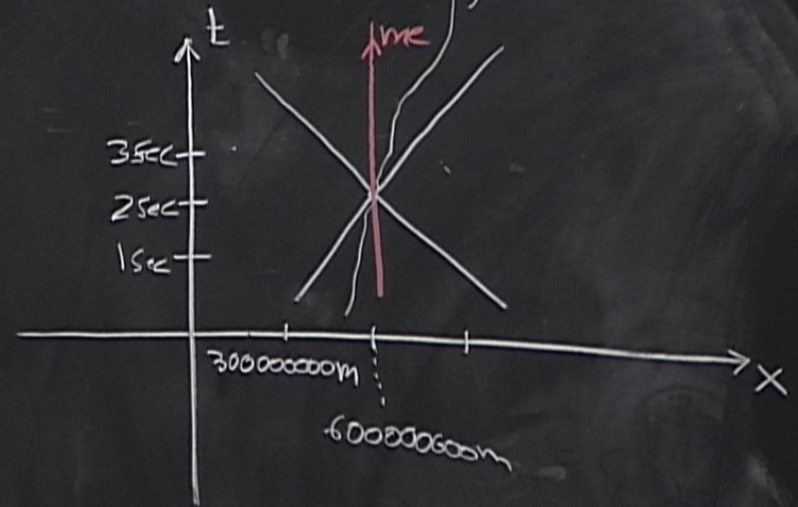








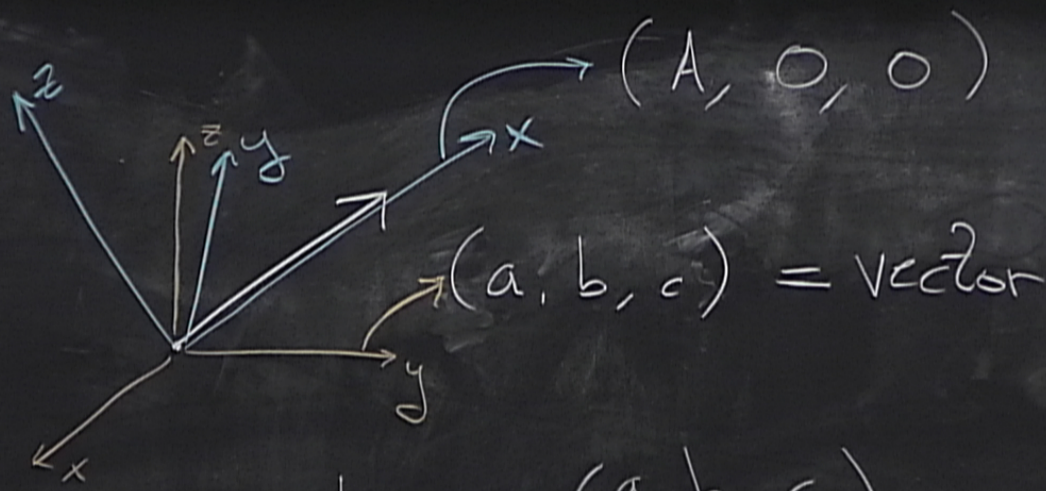
Empty Space



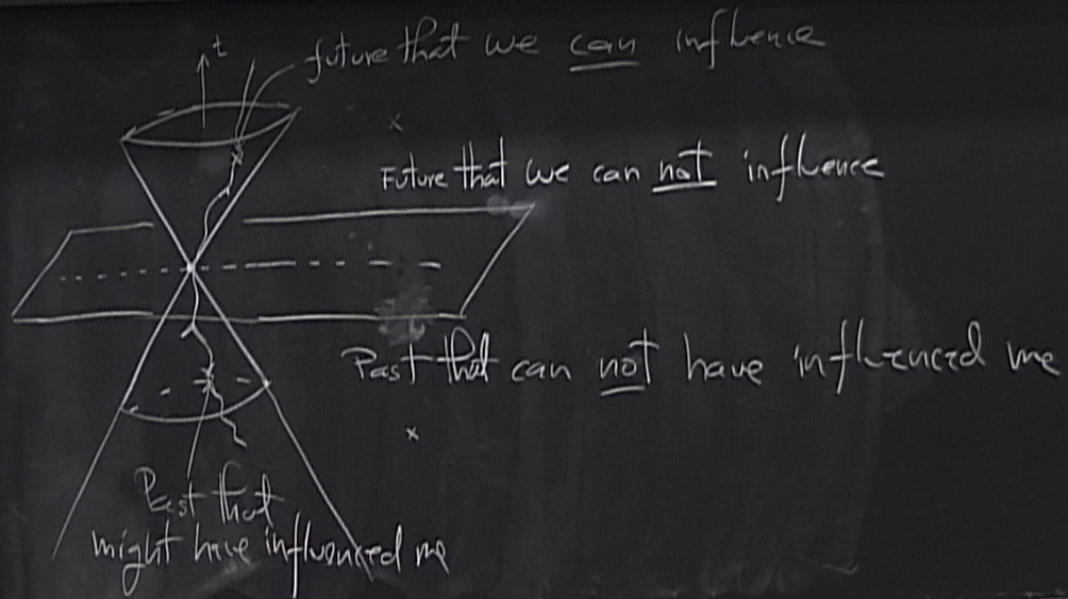
avity

= Matter
(tensor)

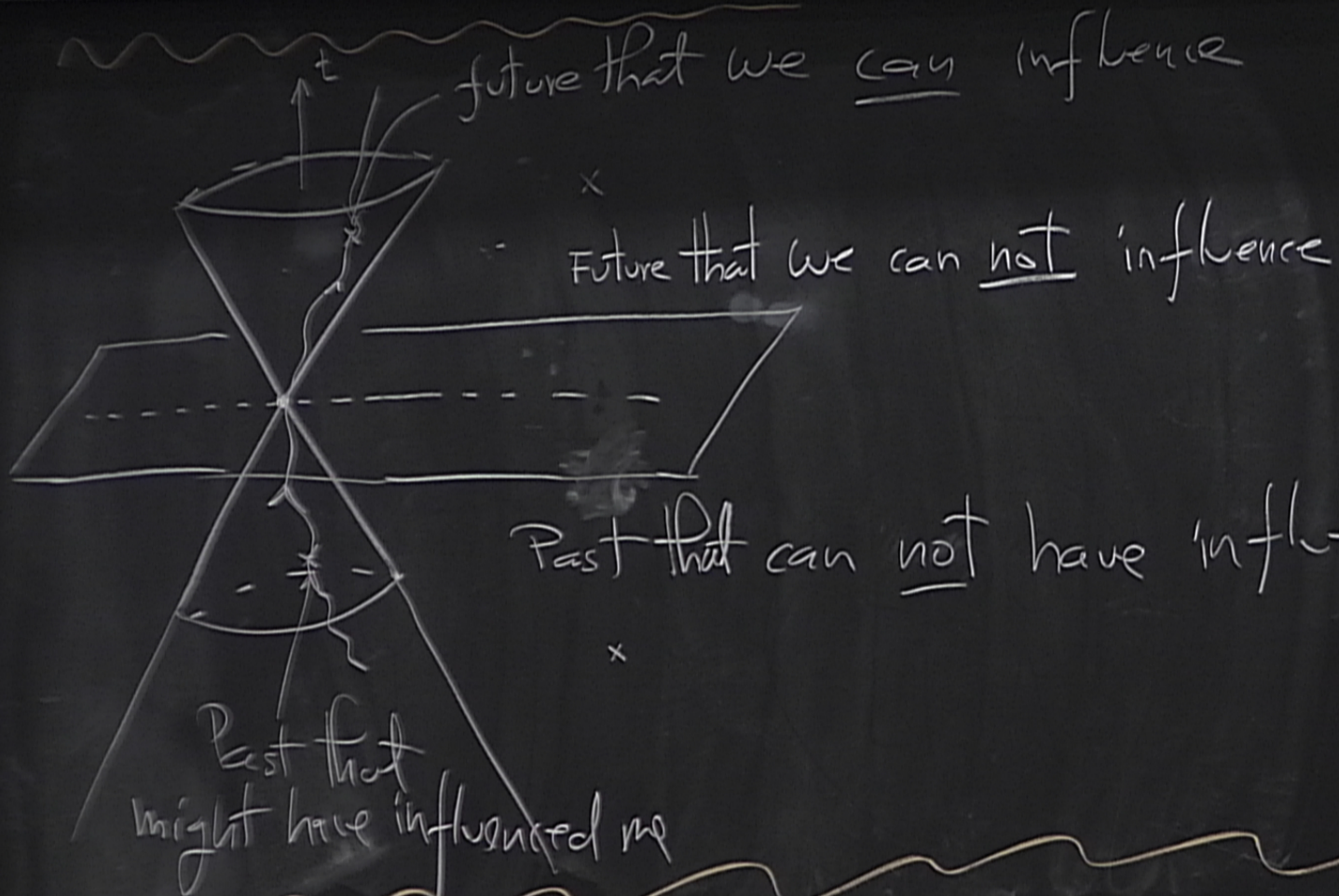
= spacetimes

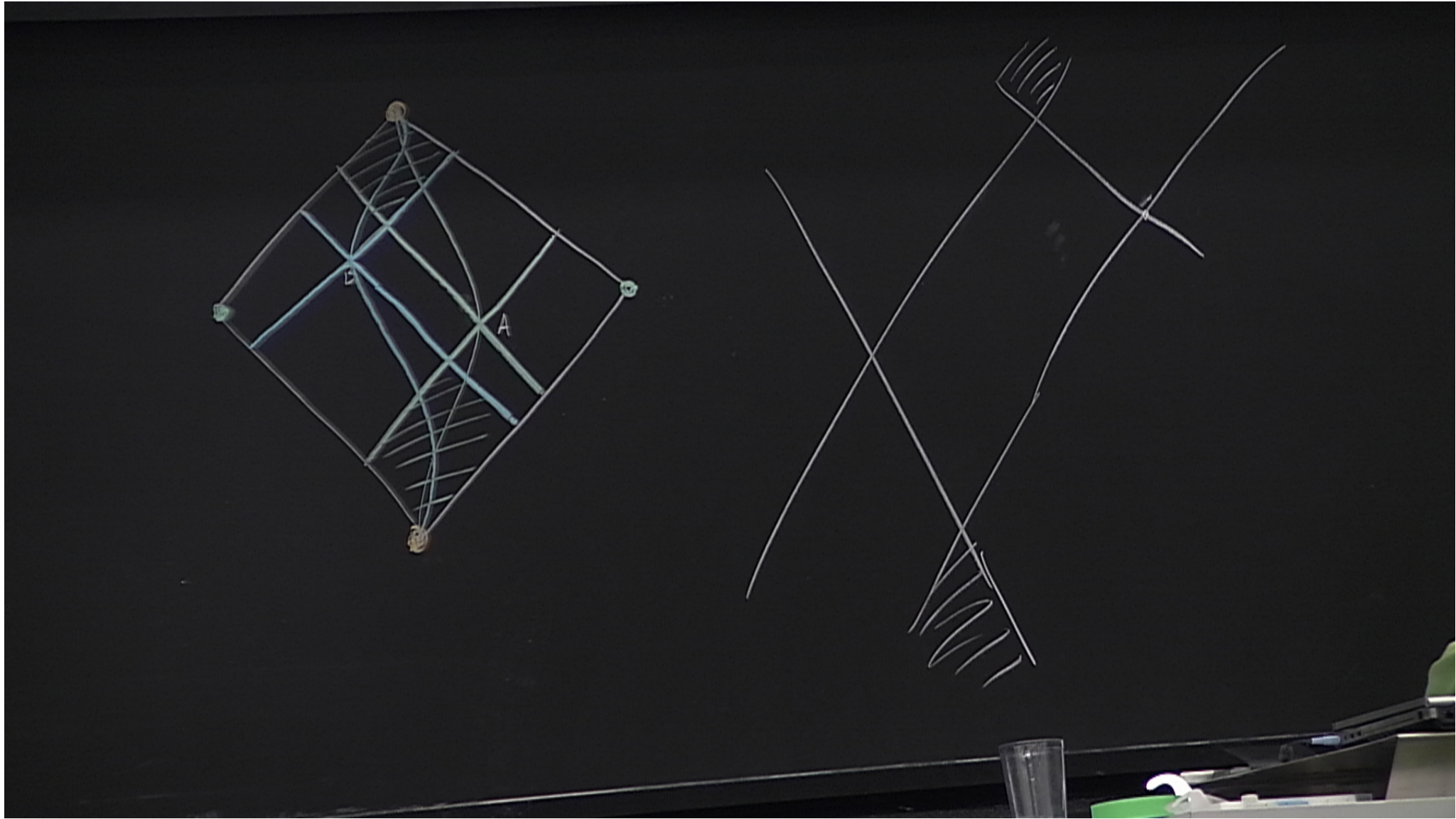


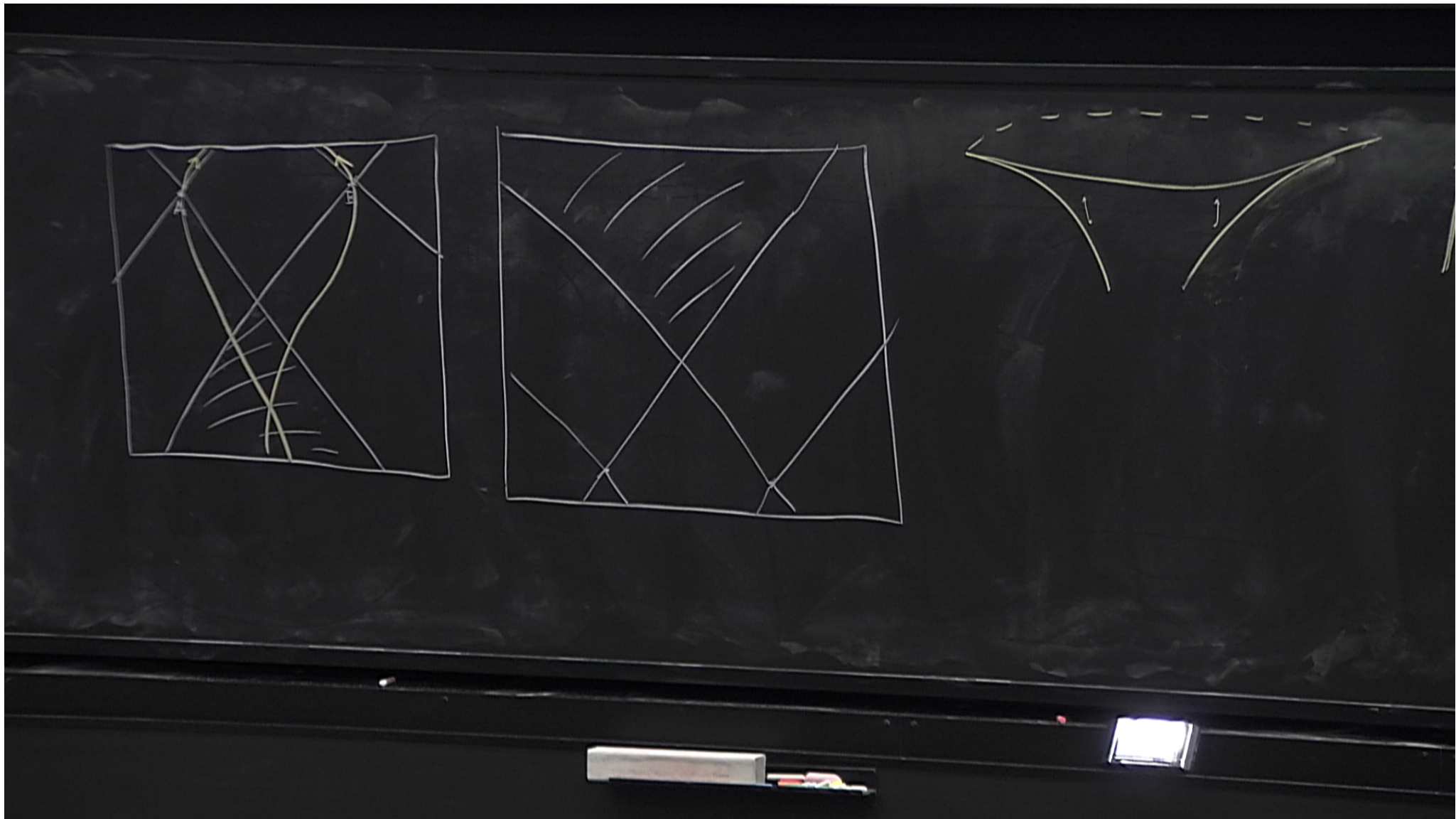
$$\text{Tensor} = \begin{pmatrix} a & b & c \\ d & e & f \\ g & h & i \end{pmatrix}$$

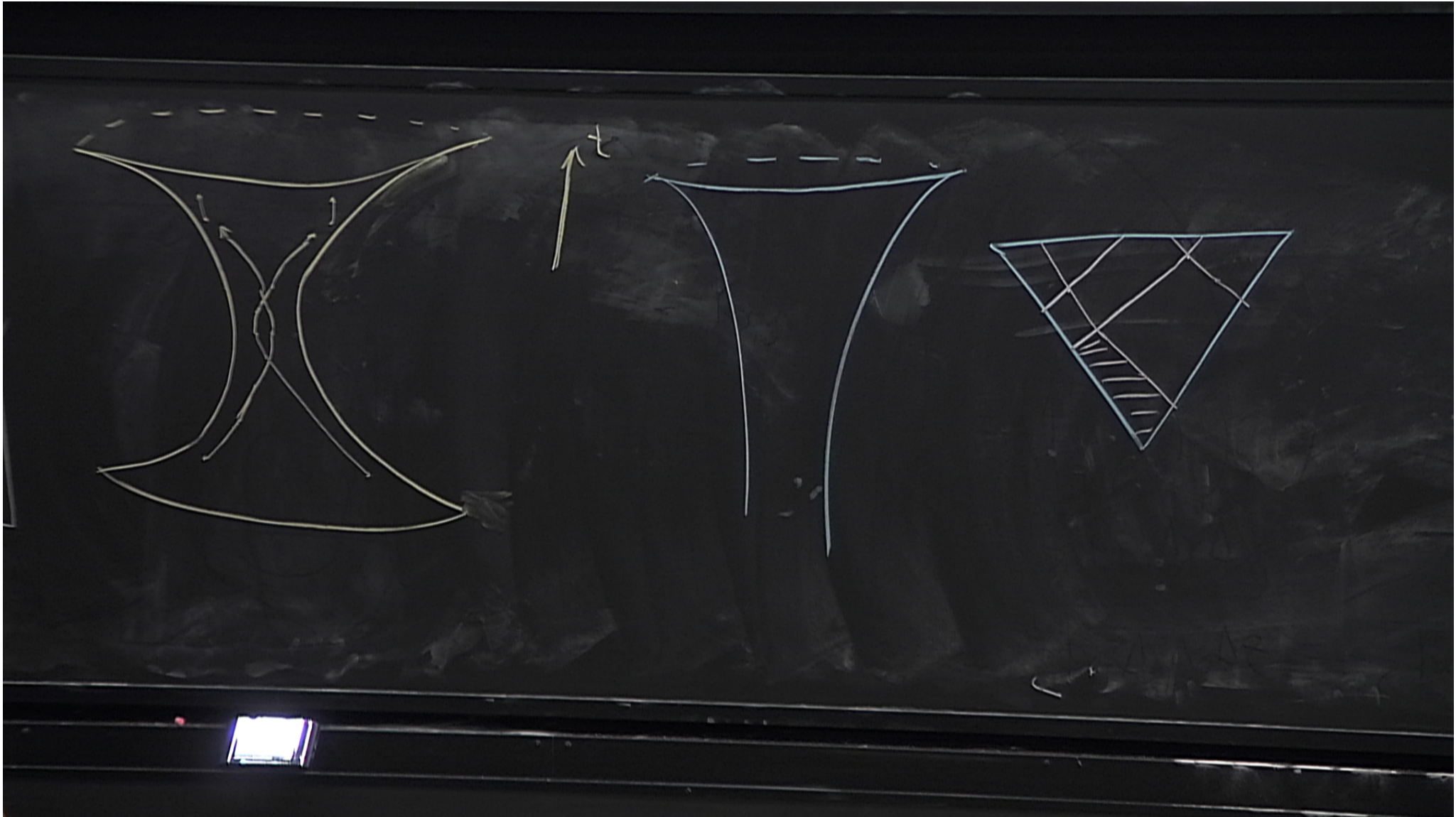


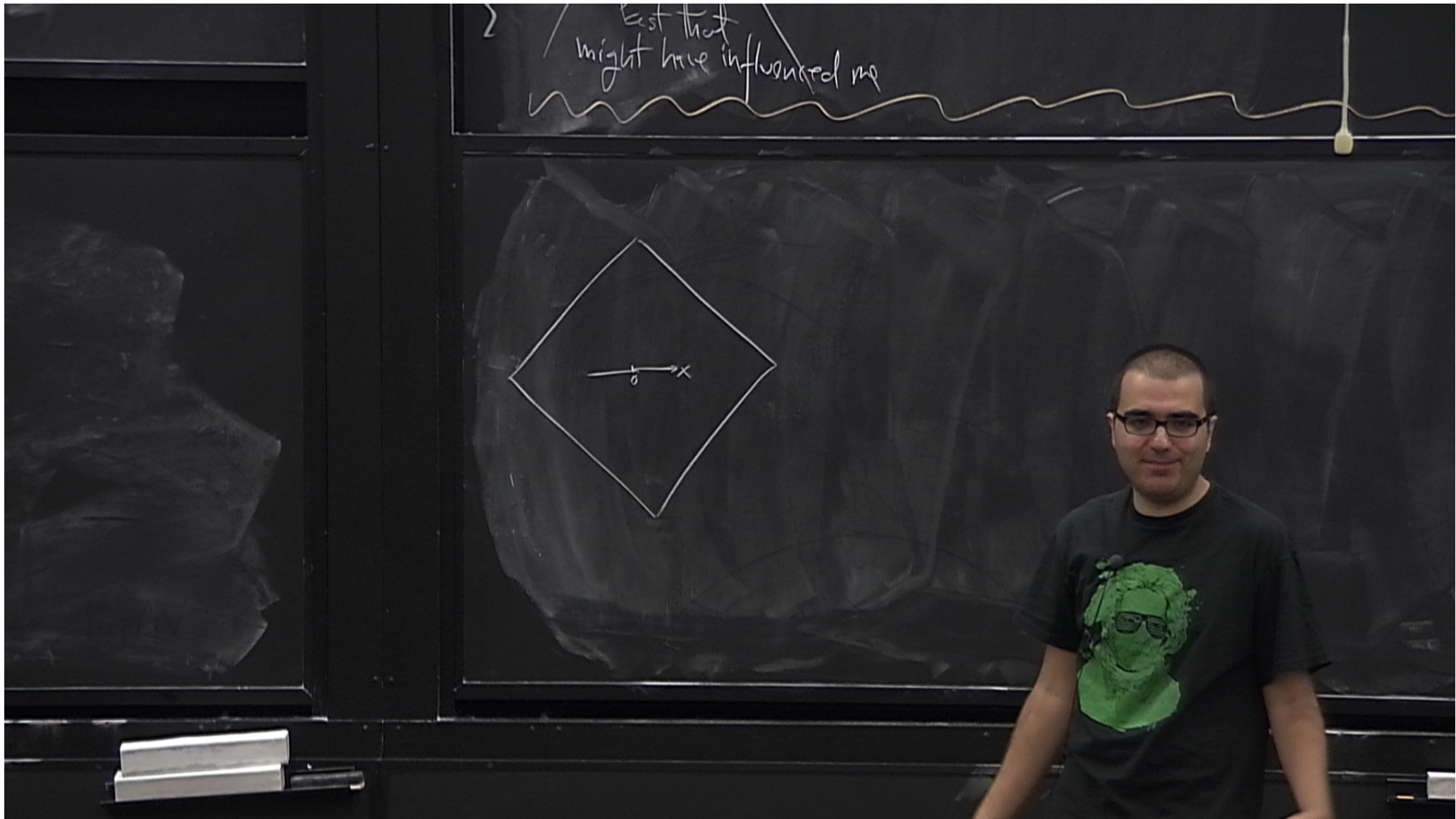




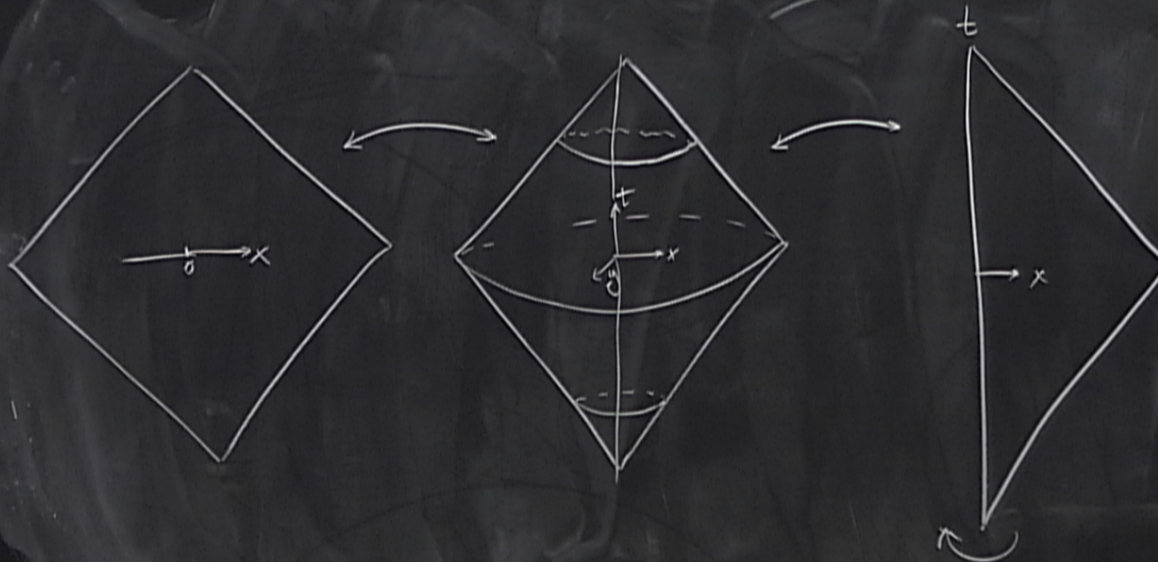




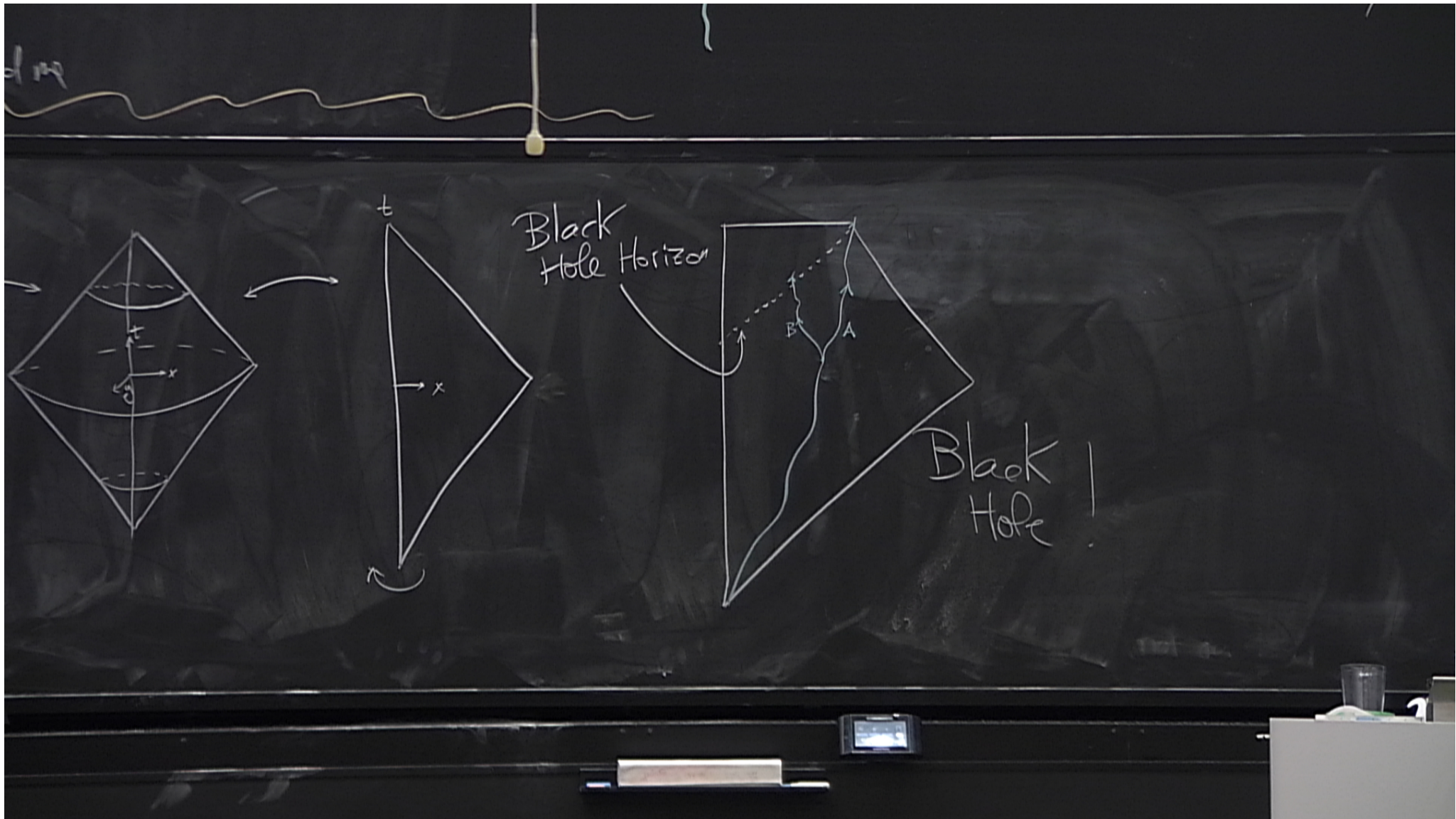




best that
might have influenced me



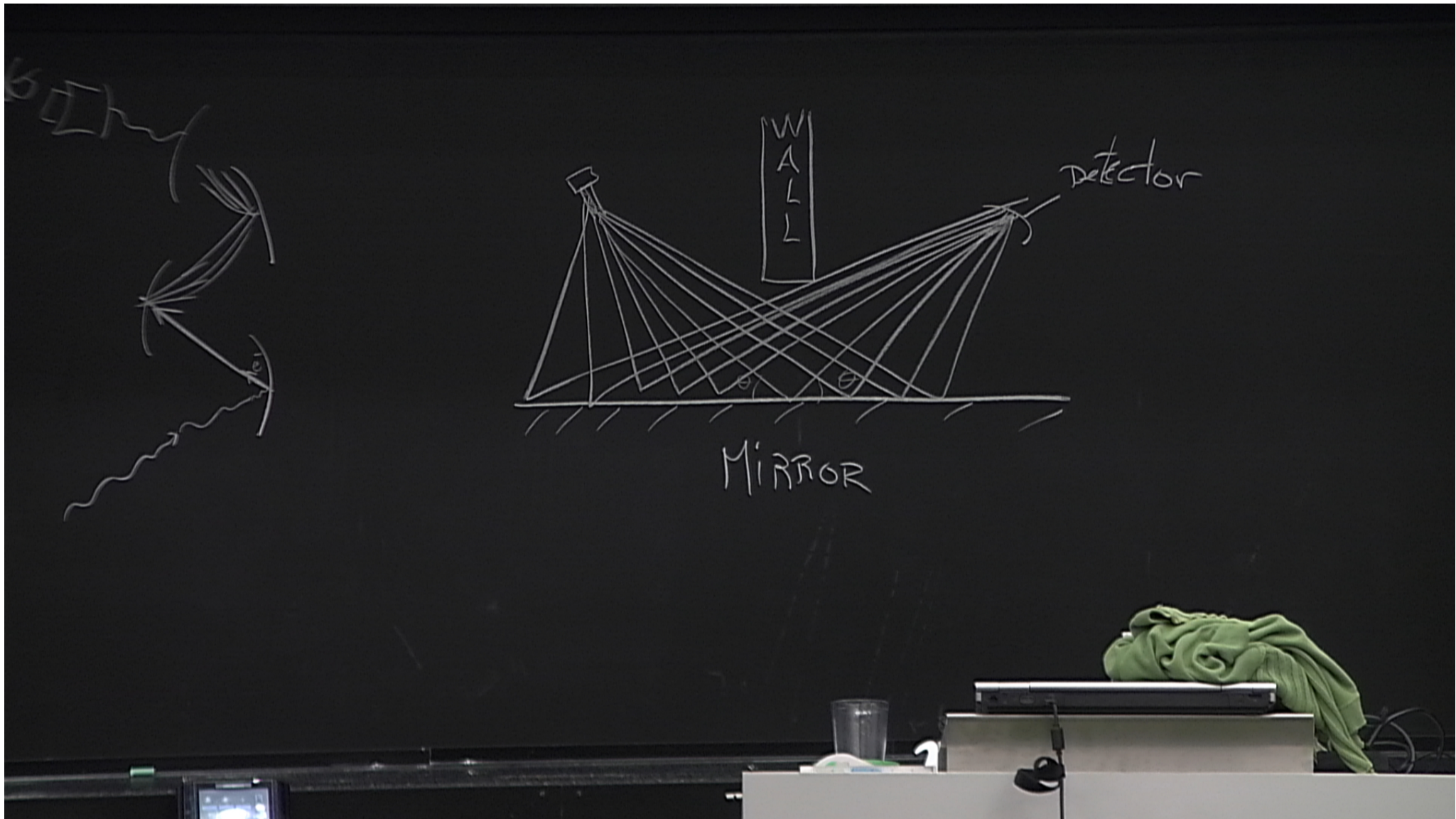




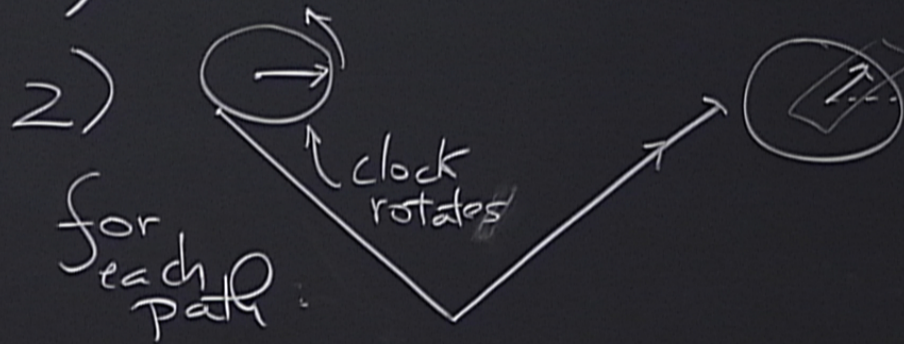
Quantum Mechanics

light is made of particles (photons)



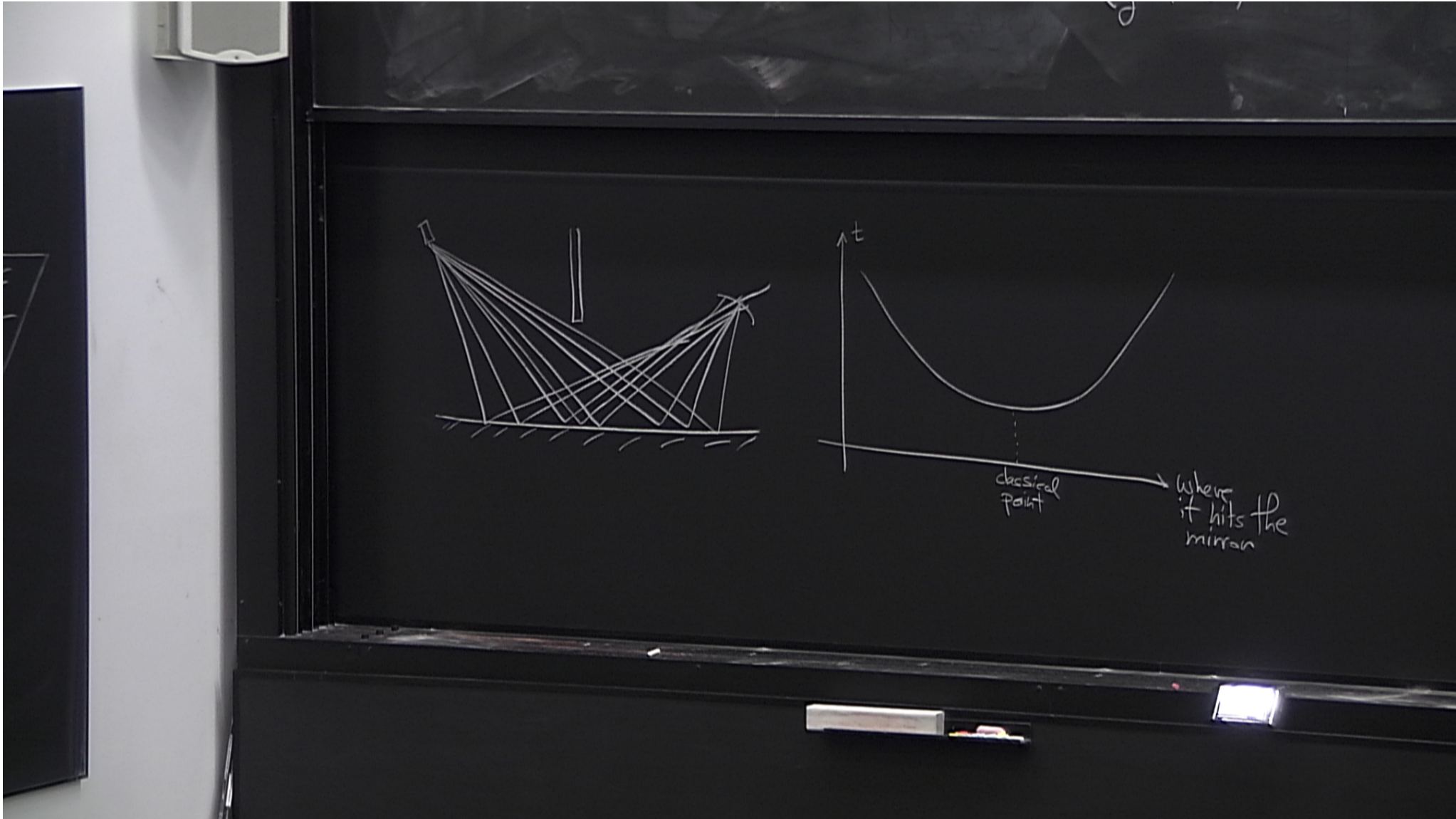


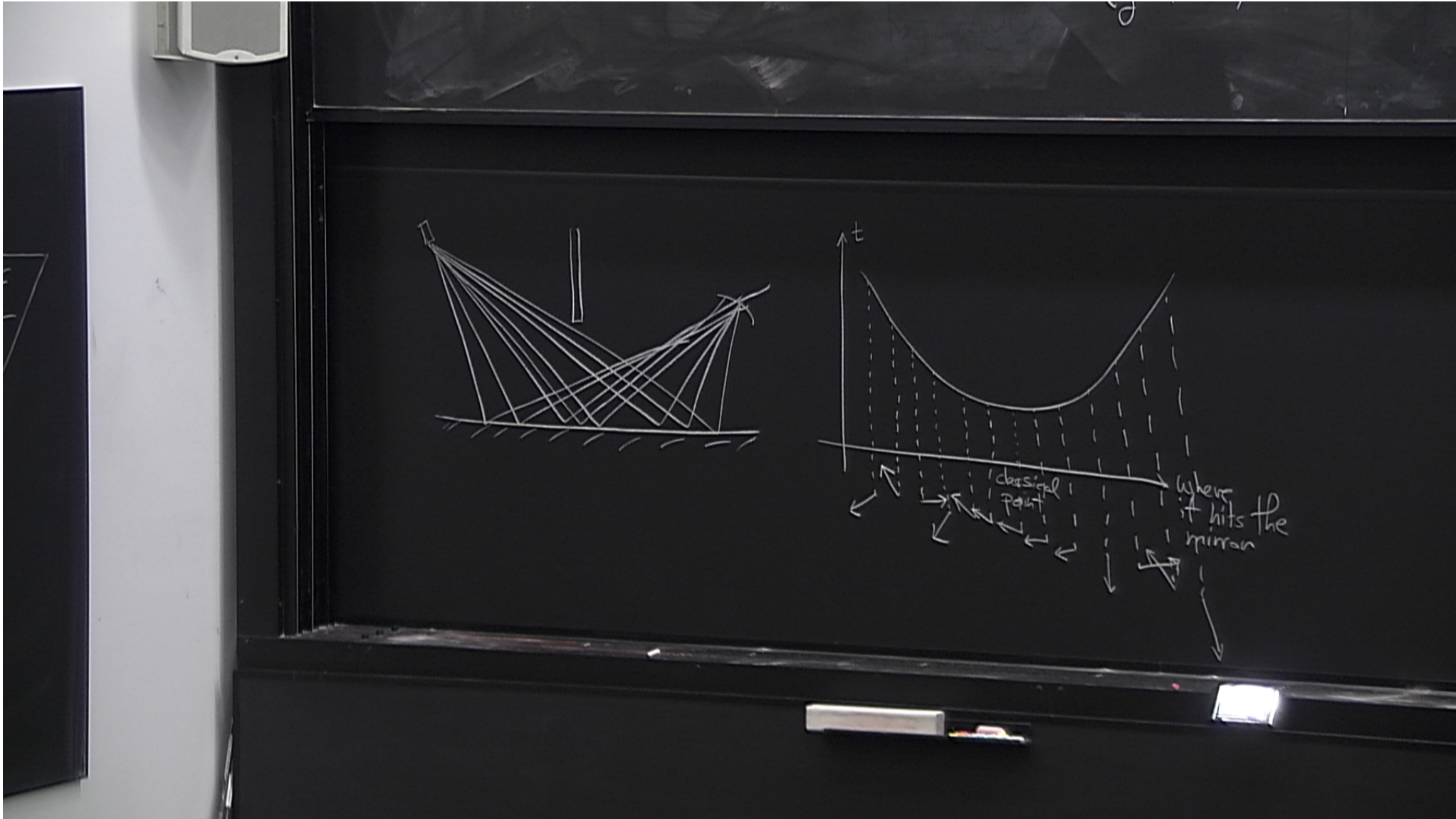
1) Draw all paths

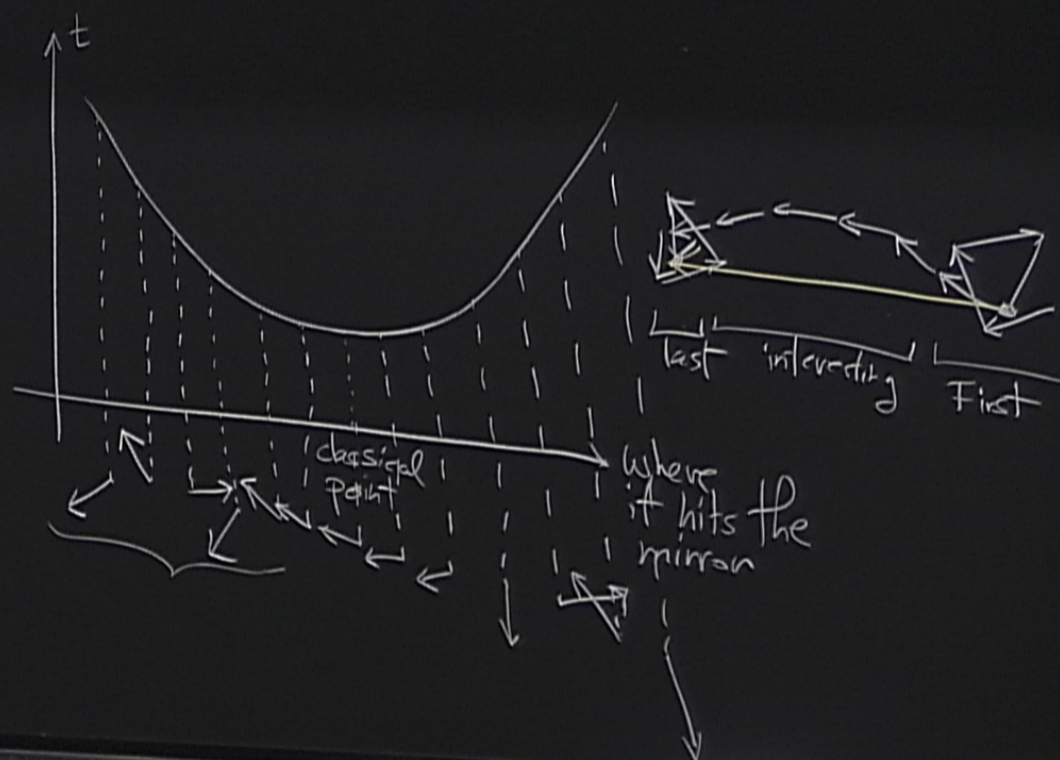
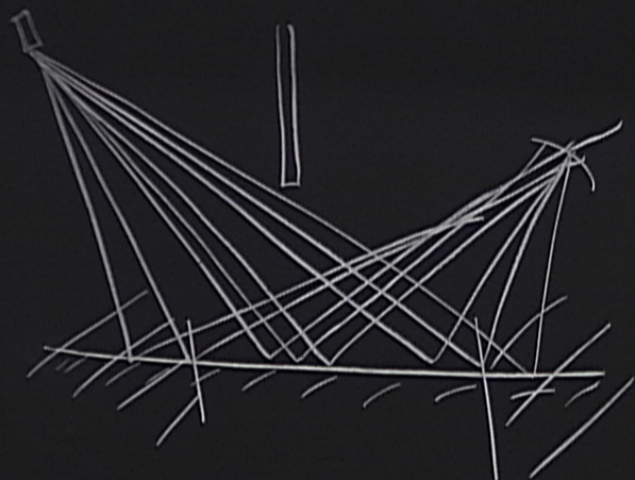


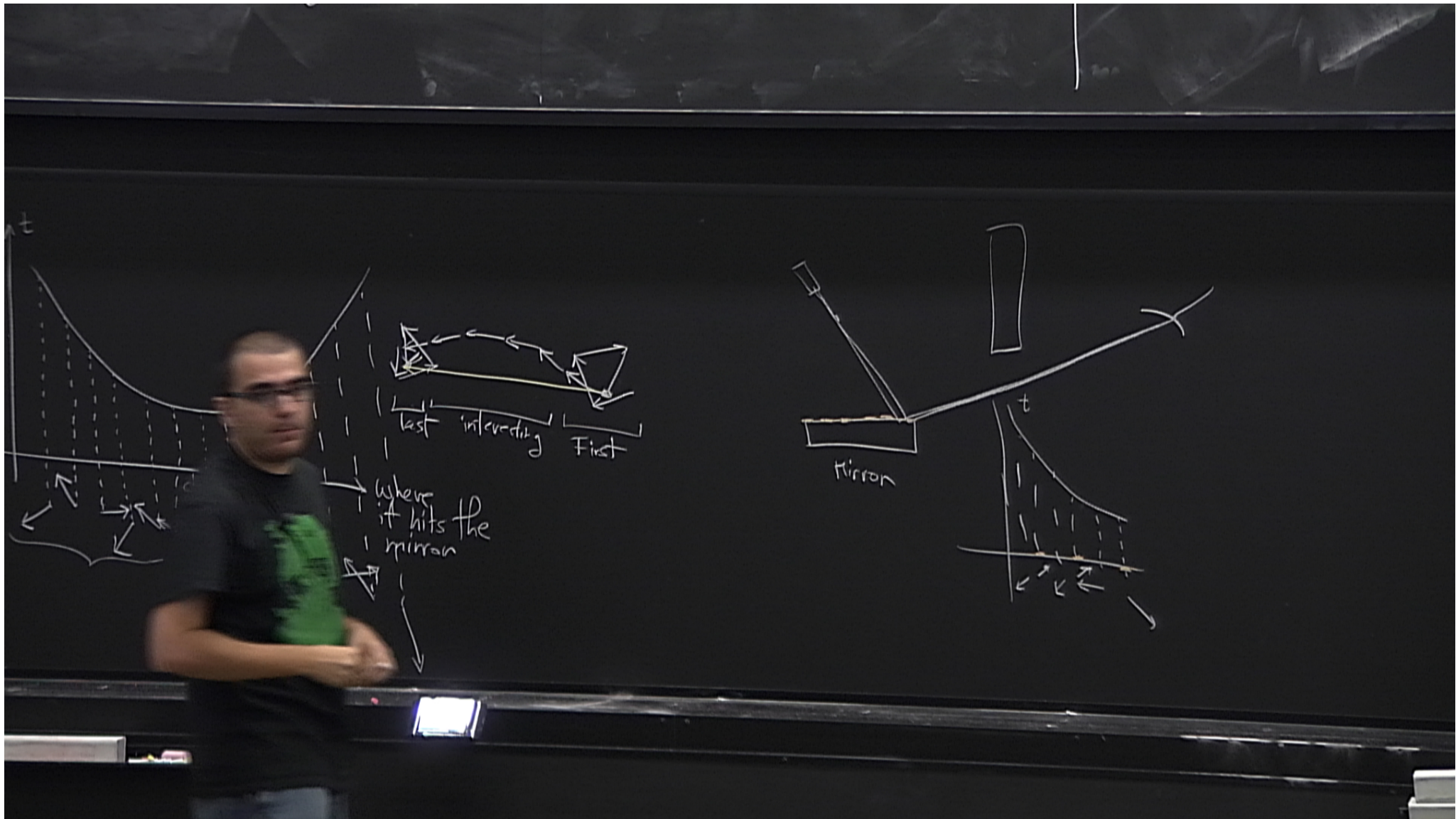
3) Add up all vectors

$$\text{Prob}(A \rightarrow B) = (\text{Size of vector})^2$$

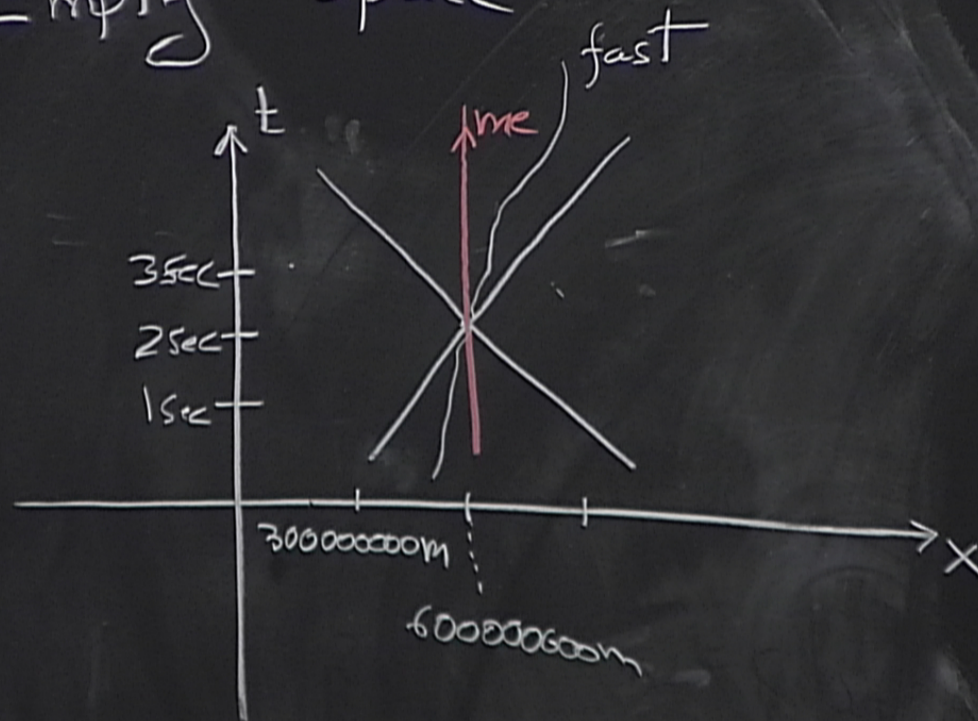


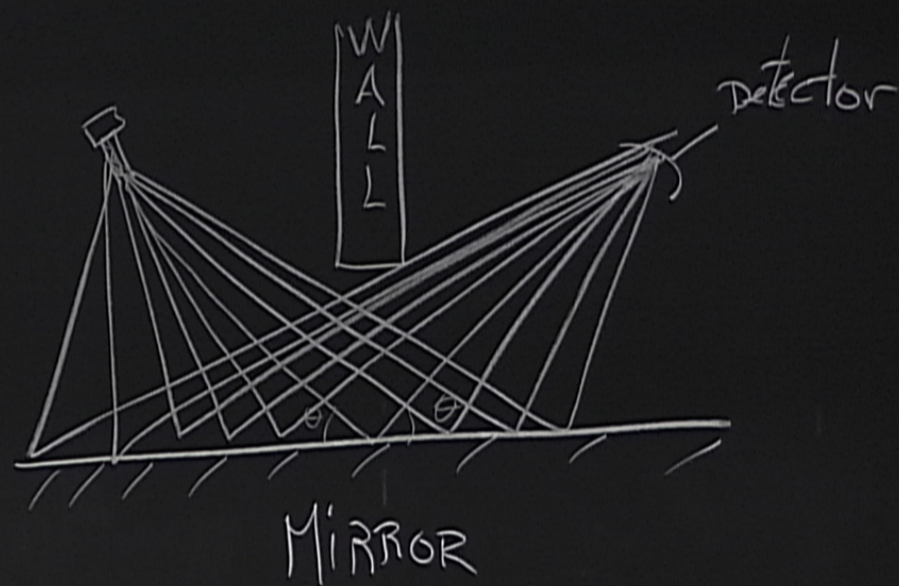
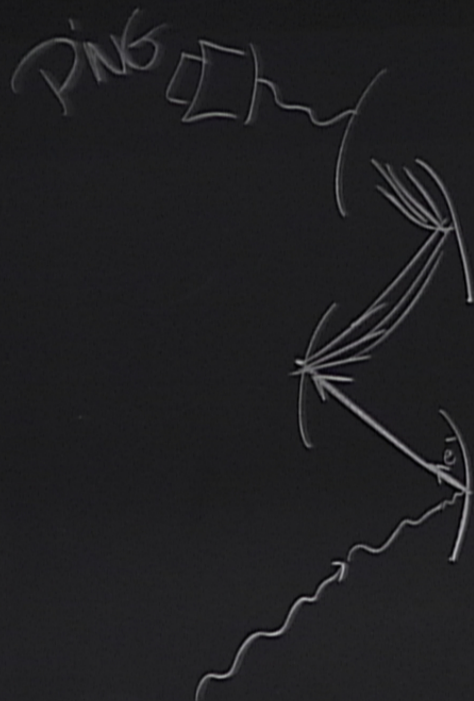


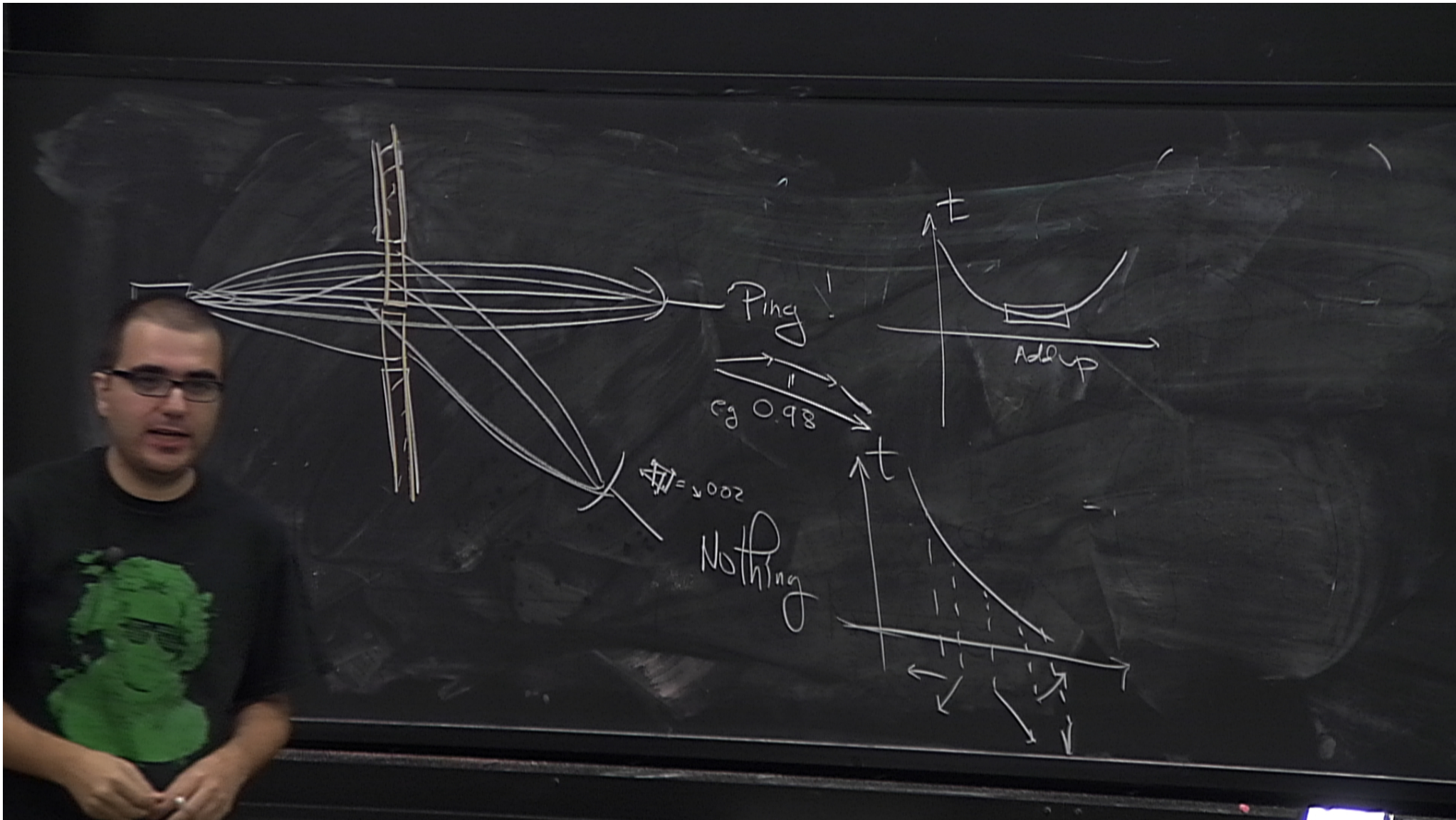


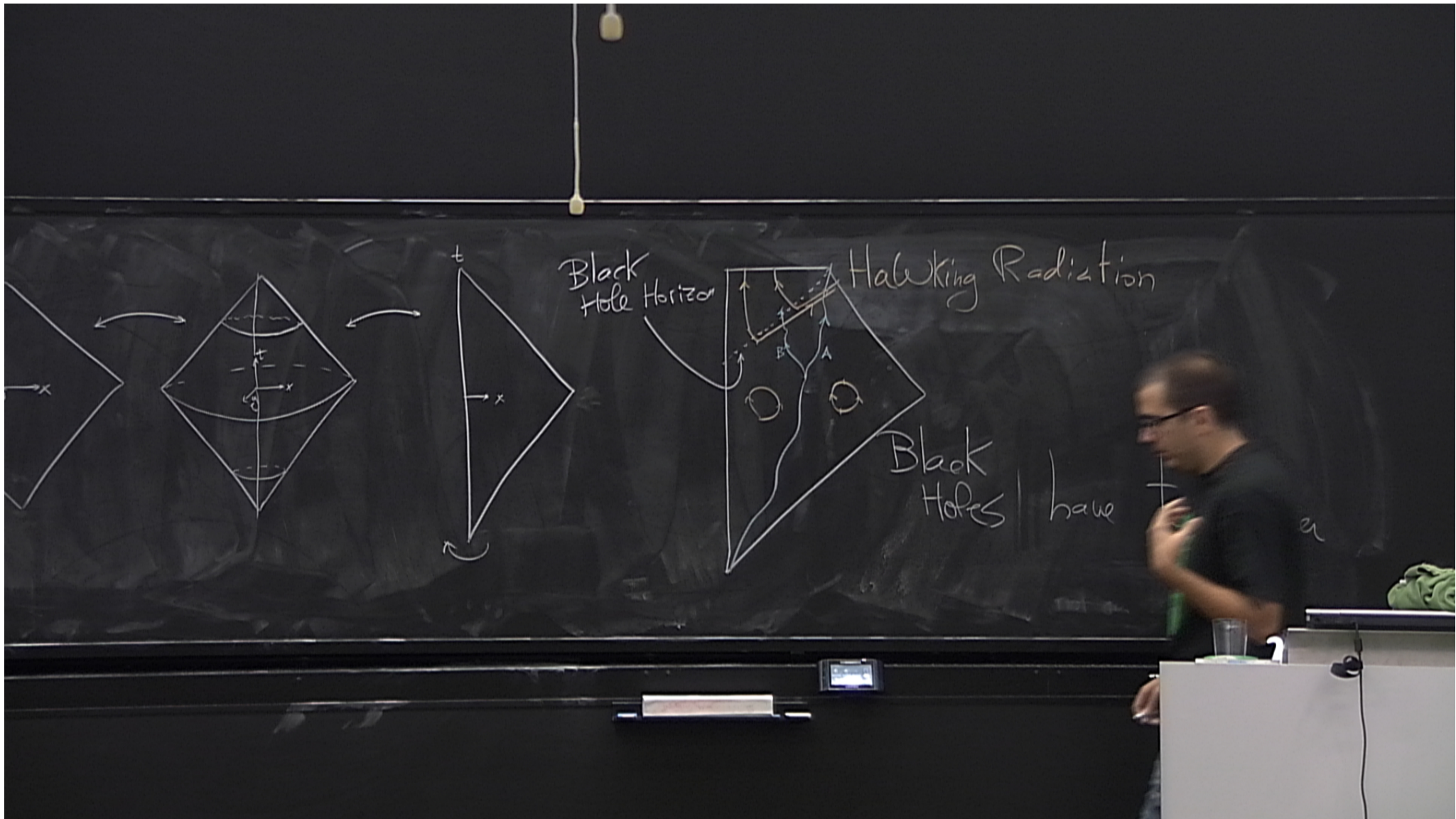


Empty Space











Hawking Radiation

Can compute its entropy = ~~# Volume~~
= # Area
↑
1/4

Black Holes have temperature