

Title: Intrinsic and extrinsic points of view

Date: Nov 15, 2017 12:10 PM

URL: <http://pirsa.org/17110132>

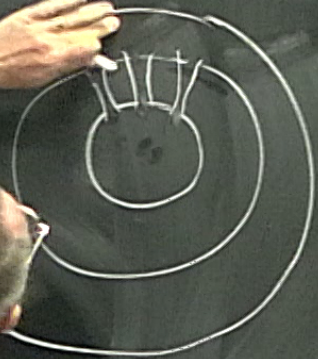
Abstract:

matls
1 Intrinsic vs 1 Extrinsic

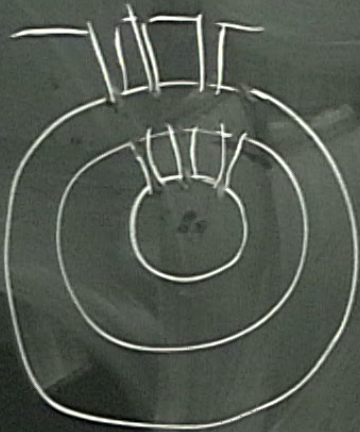
mostly
| Intrinsic vs | Extrinsic

Not PI for GG

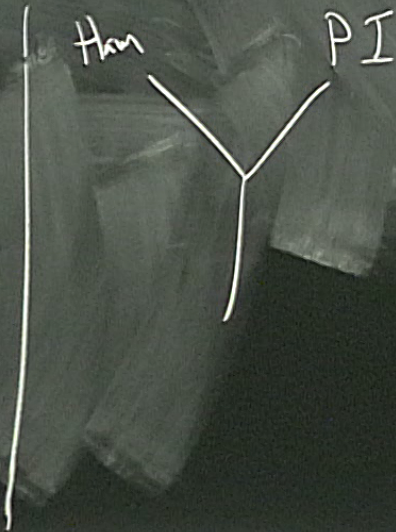
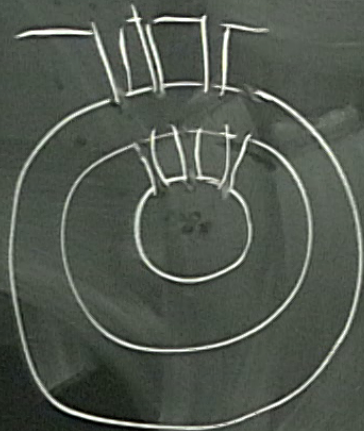
Not PI for GG



Not PI for GG

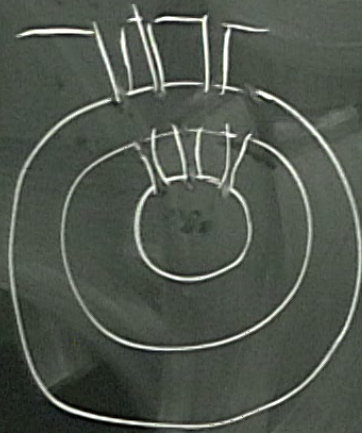


Not PI for GG



Internal vs External

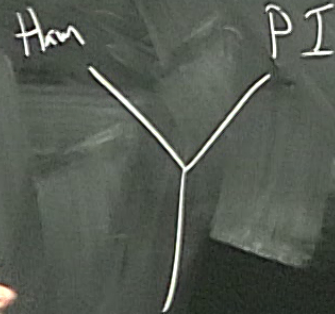
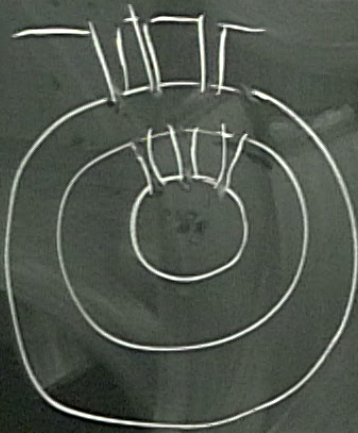
Not PI for GG



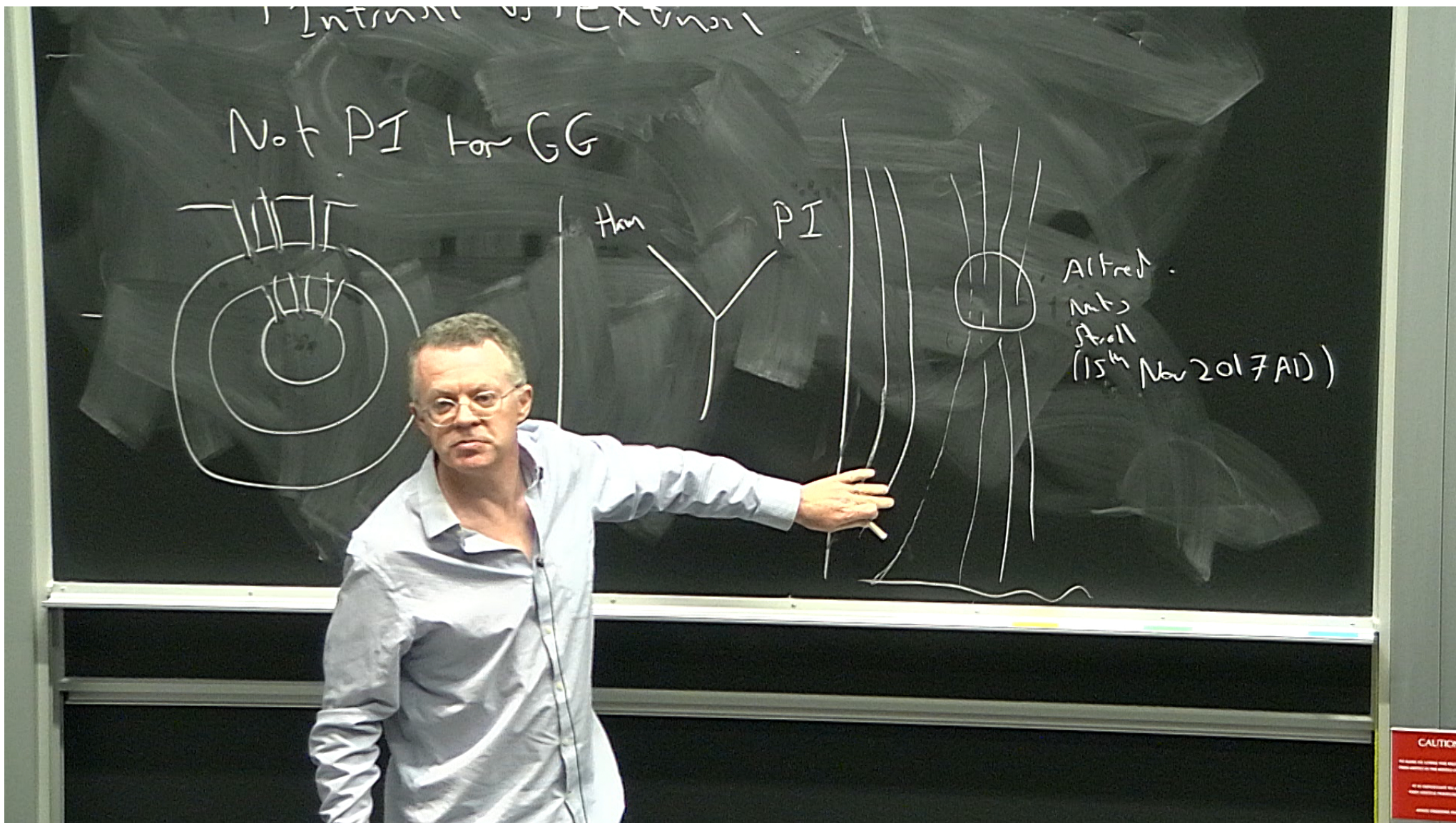
Altred.
Nuts
Stall
(15th Nov 2017 AD)

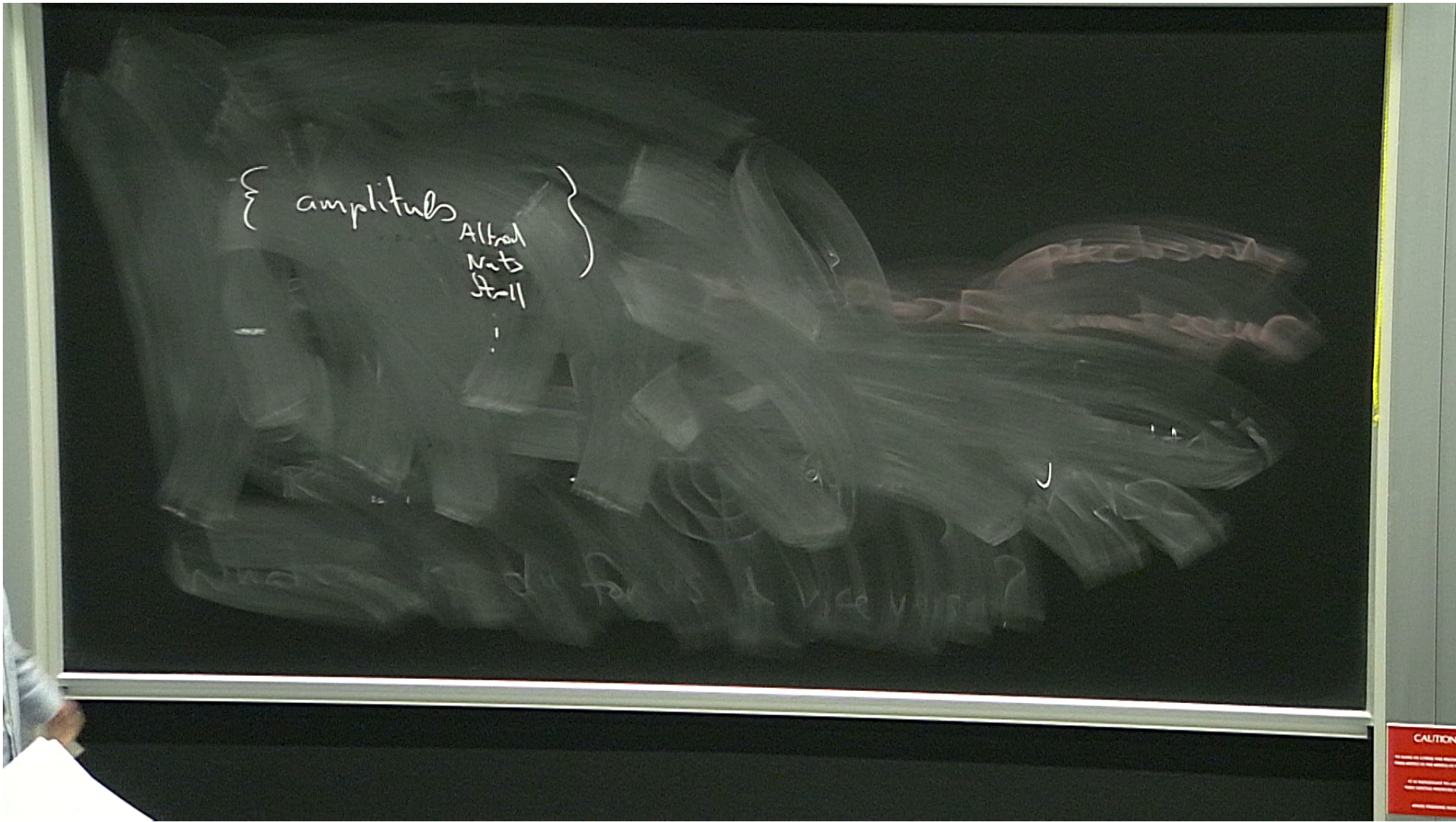
Intrinsic vs Extrinsic

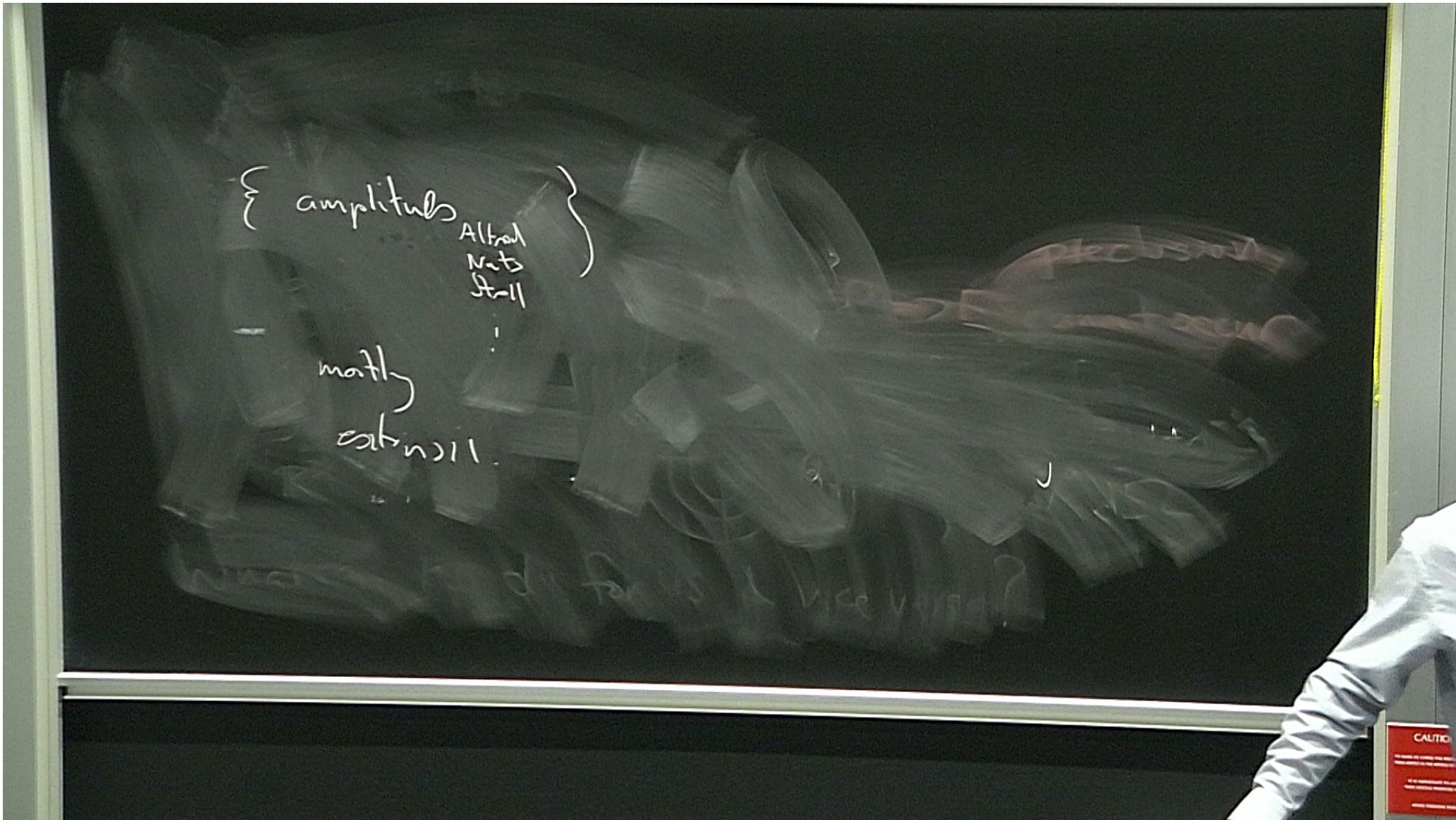
Not PI for GG

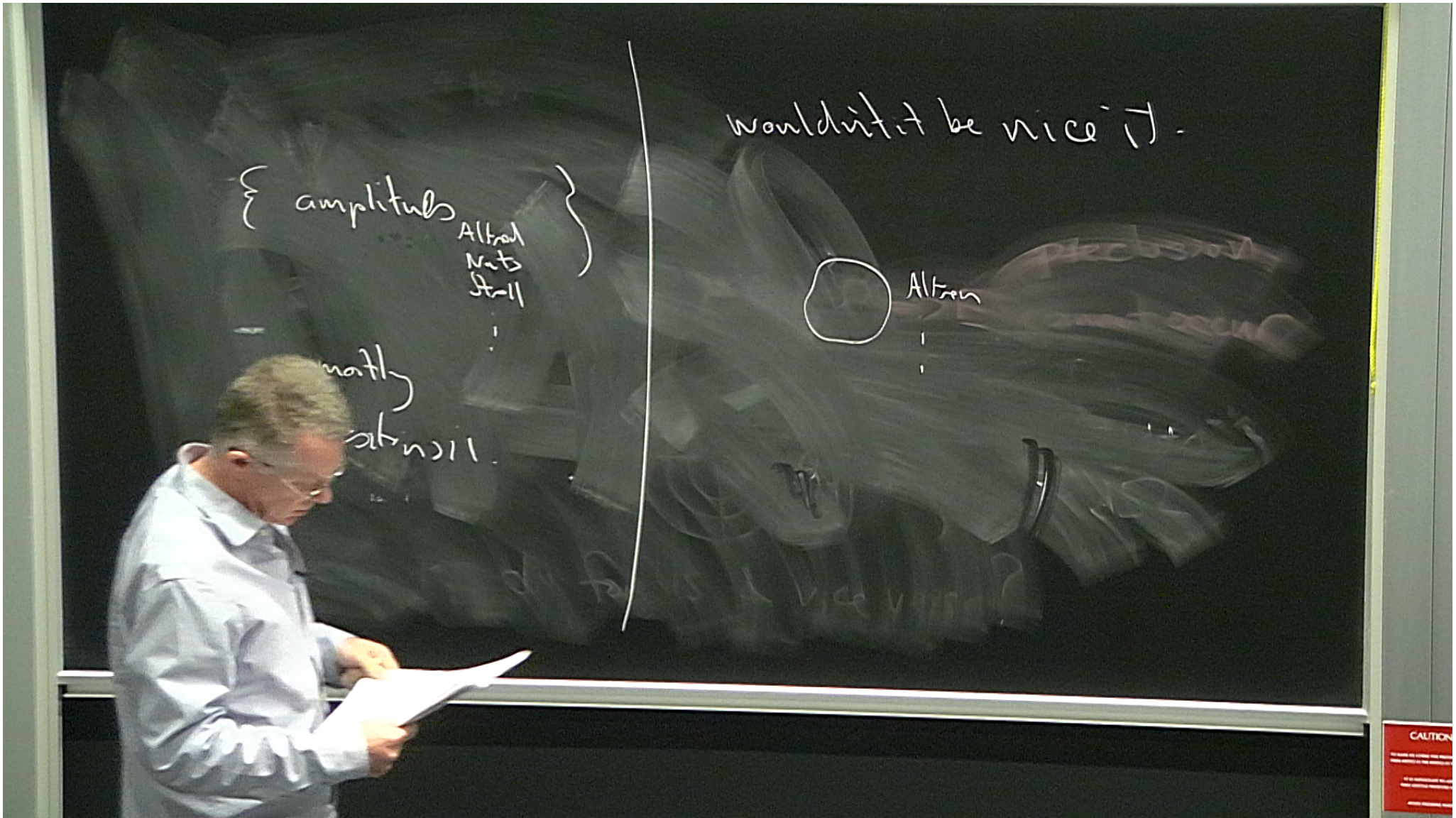


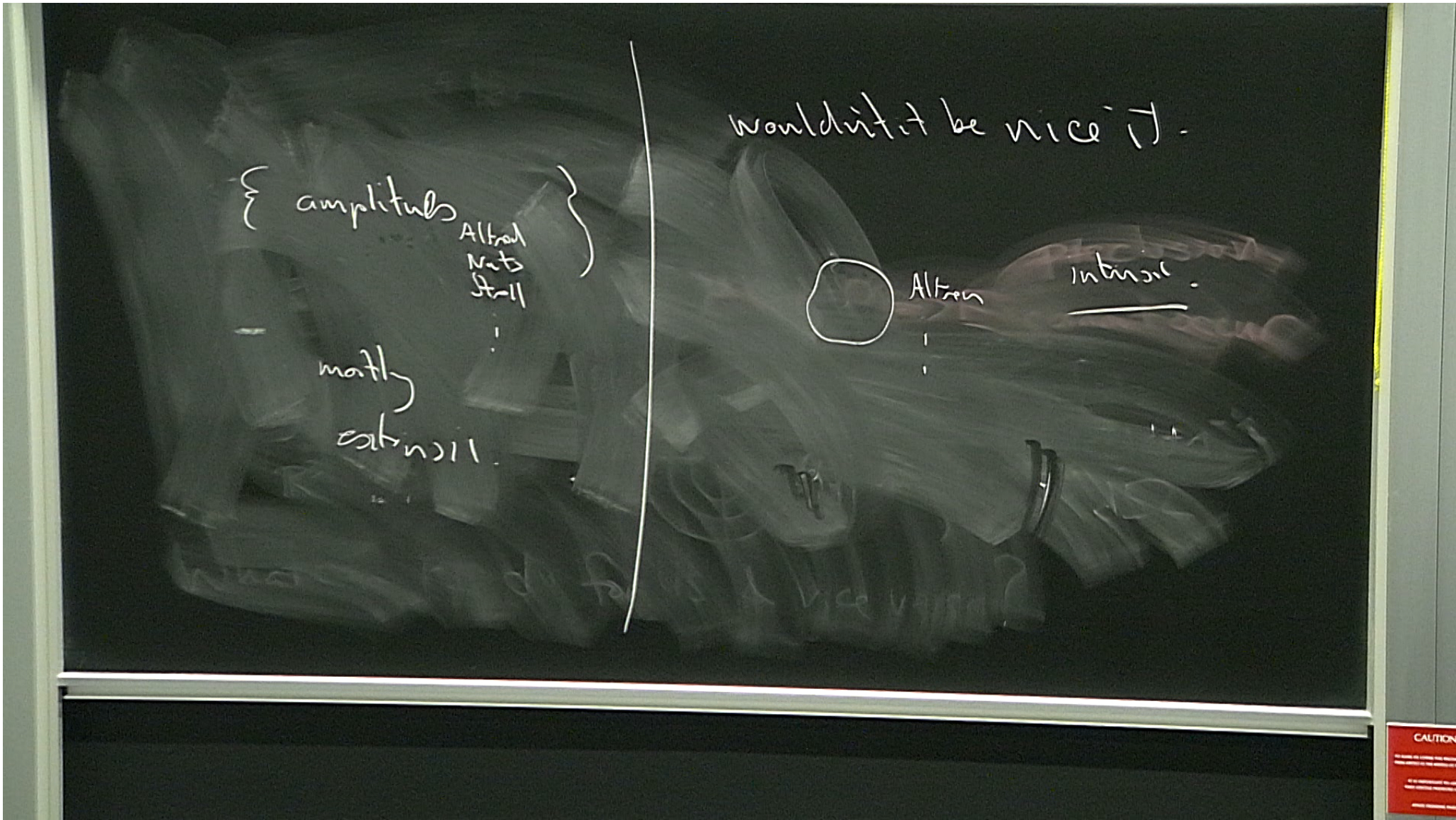
Altred.
Nuts
Stall
(15th Nov 2017 AI)









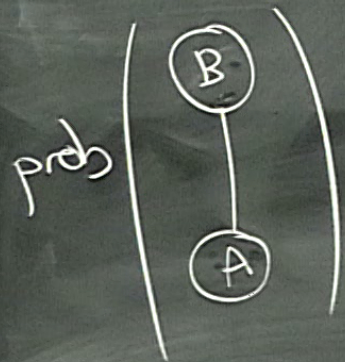


Circuits

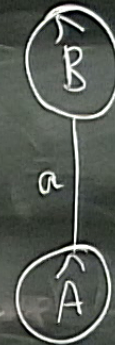
$$\text{prob} \left(\begin{array}{c} \textcircled{B} \\ | \\ \textcircled{A} \end{array} \right) = \text{tr}(\hat{A} \hat{B})$$



Circuits



$$= \text{tr}(\hat{A} \hat{B}) = \hat{A}^a \hat{B}_a =$$



CAUTION

$$\text{prob} \left(\begin{array}{c} \textcircled{B} \\ \uparrow a \\ \textcircled{A} \end{array} \right) = \text{tr}(\hat{A} \hat{B}) = \hat{A}^a \hat{B}_a = \begin{array}{c} \textcircled{B} \\ \uparrow a \\ \textcircled{\hat{A}} \end{array}$$

$$\text{prob} \left(\begin{array}{c} \textcircled{D} \\ \uparrow \\ \textcircled{C} \uparrow \textcircled{B} \\ \uparrow \\ \textcircled{A} \end{array} \right) = \begin{array}{c} \textcircled{D} \\ \uparrow \\ \textcircled{C} \uparrow \textcircled{B} \\ \uparrow \\ \textcircled{\hat{A}} \end{array}$$

$$\text{prob} \left(\begin{array}{c} \textcircled{B} \\ \uparrow a \\ \textcircled{A} \end{array} \right) = \text{tr}(\hat{A} \hat{B}) = \hat{A}^a \hat{B}_a = \begin{array}{c} \textcircled{B} \\ \uparrow a \\ \textcircled{\hat{A}} \end{array}$$

$$\text{prob} \left(\begin{array}{c} \textcircled{D} \\ \uparrow \\ \textcircled{C} \downarrow \\ \textcircled{B} \uparrow \\ \textcircled{A} \end{array} \right) = \begin{array}{c} \textcircled{D} \\ \uparrow \\ \textcircled{C} \downarrow \\ \textcircled{B} \uparrow \\ \textcircled{\hat{A}} \end{array}$$

Operator tensor
formulation.

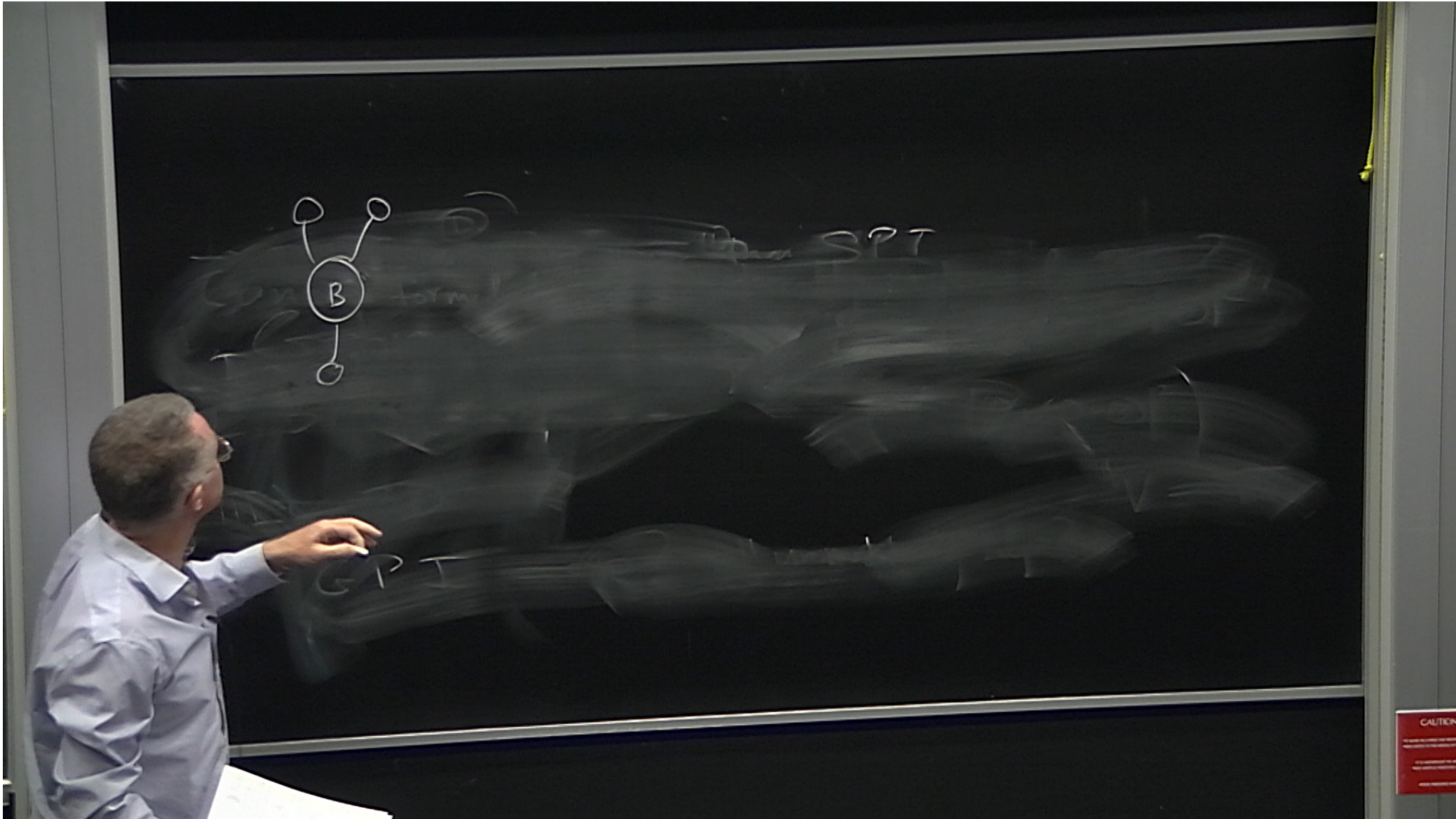


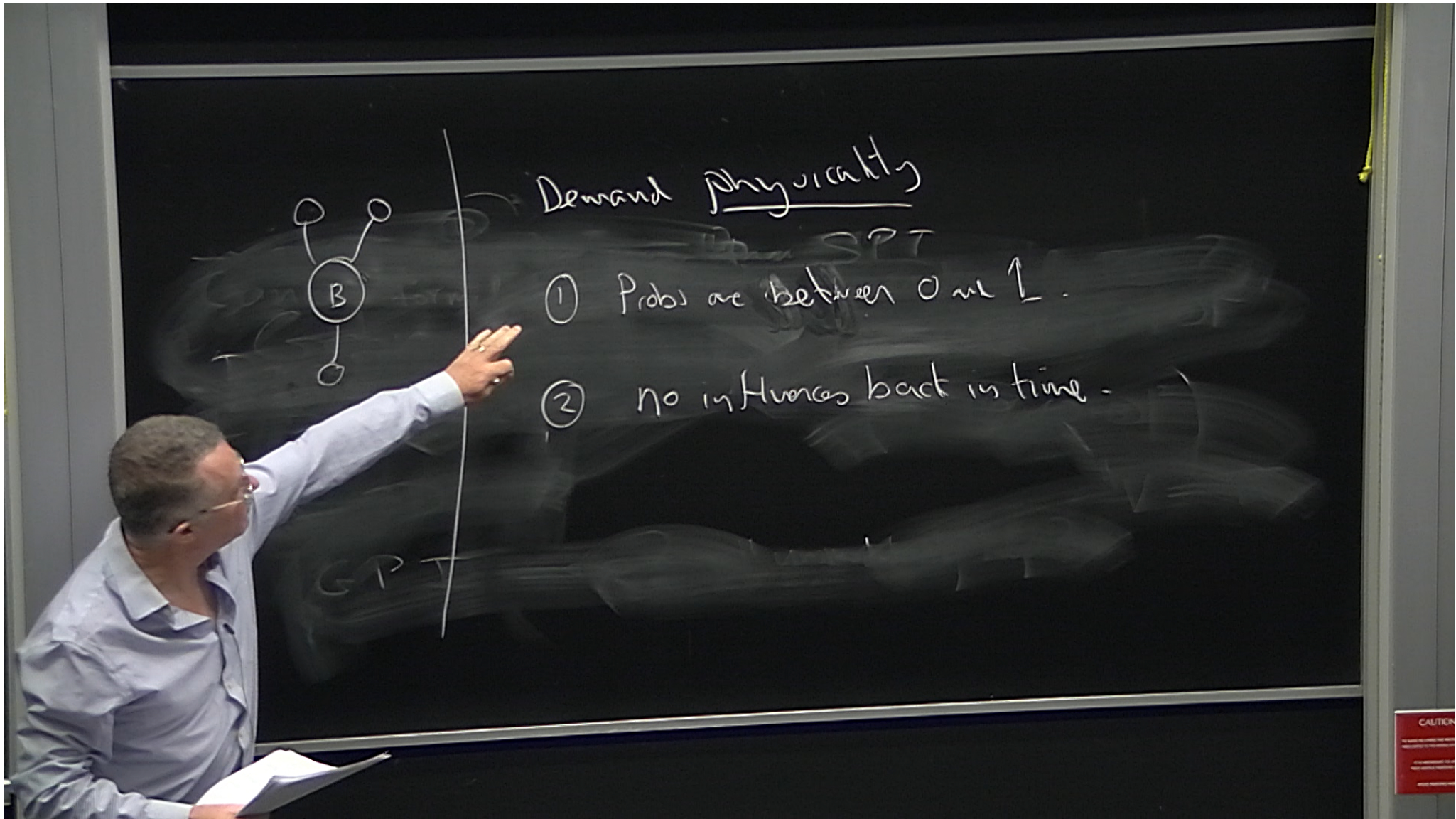
$$\text{prob} \left(\begin{array}{c} \textcircled{B} \\ \uparrow a \\ \textcircled{A} \end{array} \right) = \text{tr}(\hat{A} \hat{B}) = \hat{A}^a \hat{B}_a = \begin{array}{c} a \\ \uparrow \\ \textcircled{\hat{A}} \end{array}$$

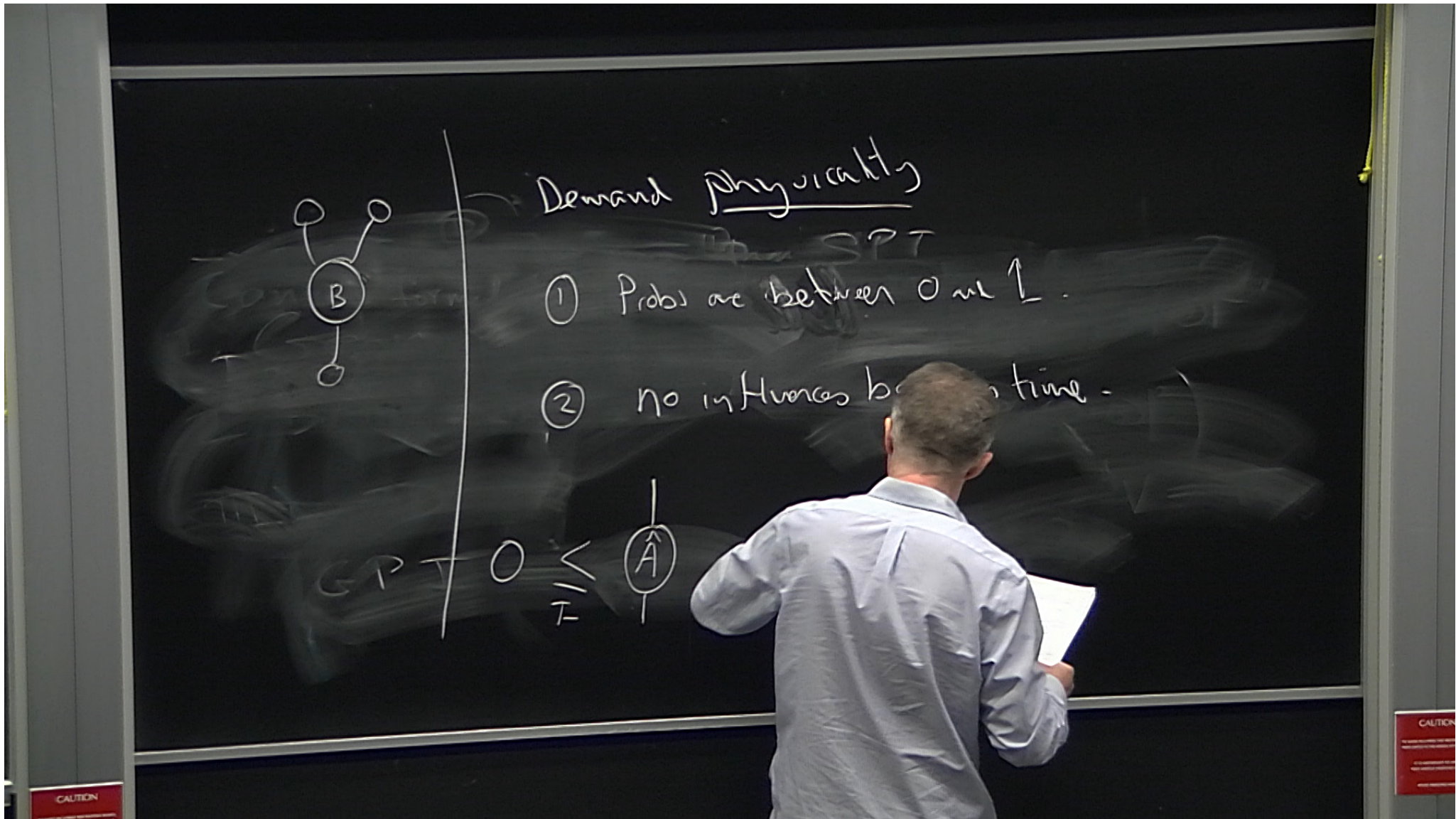
$$\text{prob} \left(\begin{array}{c} \textcircled{D} \\ \uparrow \\ \textcircled{C} \rightarrow \textcircled{B} \\ \uparrow \\ \textcircled{A} \end{array} \right) = \begin{array}{c} \textcircled{D} \\ \uparrow \\ \textcircled{C} \rightarrow \textcircled{B} \\ \uparrow \\ \textcircled{A} \end{array}$$

operator tensor formulation.

$$\begin{array}{c} \textcircled{\hat{B}} \end{array}$$







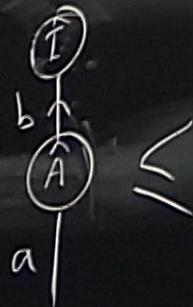
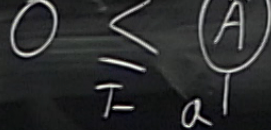


Demand Physicality

① Probs are between 0 and 1.

② no influences back in time.

GPT





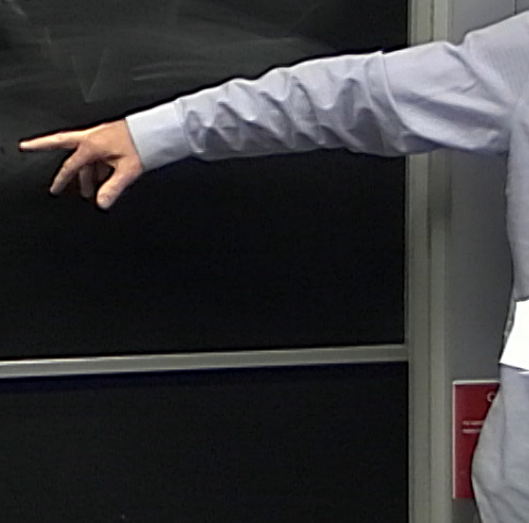
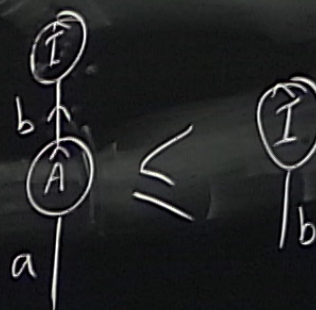
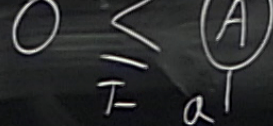
Demand Physicality

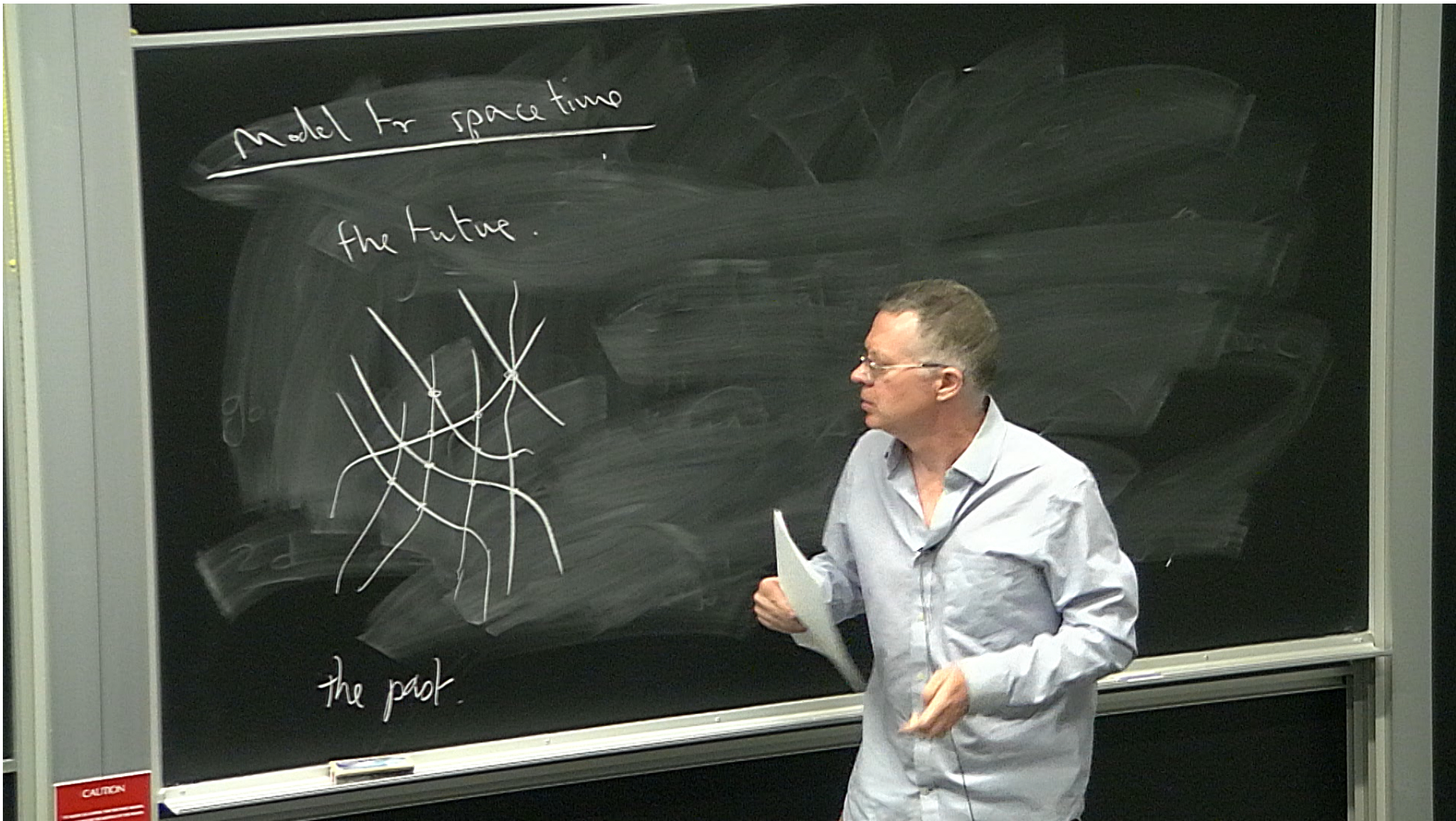
SPT

① Probs are between 0 and 1.

② no influences back in time.

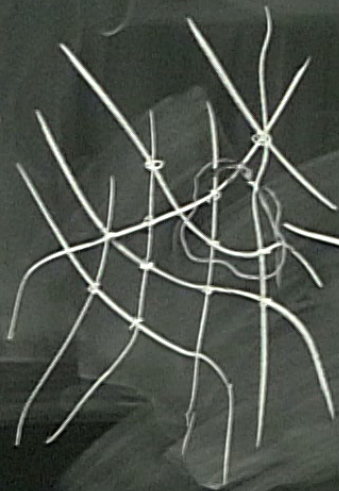
GPT





Model for spacetime

the future.



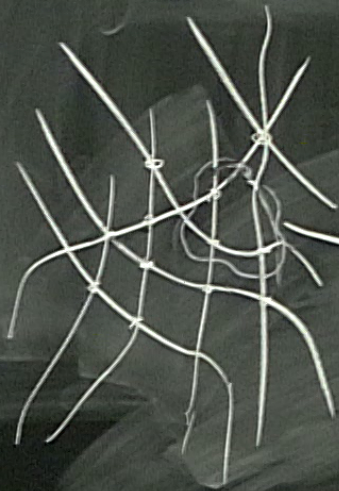
the past.

$\hat{A}_b^a$ [outcomes]

$\hat{A}_b^a$ [outcomes]

Model for spacetime

the future.



$\hat{A}_b^a$ (outcomes)

$\hat{A}_b^a$ (outcomes')

the past.