

# Special Talk

UCLA

Monday, March 2<sup>nd</sup> @ 2pm  
Schwinger Lounge

## “B-Model-ing the (Ginib)re Model”

**Simeon Hellerman (Kavli IPMU)**

**Abstract:** In this talk I will discuss the second-simplest Dijkgraaf-Vafa-type holographic duality between a matrix integral and the topological B-model on a local Calabi-Yau. On the matrix side is a gaussian two-matrix ensemble known as the Ginibre ensemble; on the string side is the topological B-model on the deformed conifold, with a greater diversity of boundary conditions than allowed to the usual Dijkgraaf-Vafa duality. I will also discuss orientifolds of the geometry and a relationship to the simplest neural network, the one-layer network known as the Rosenblatt perceptron.