



## **ICTS String Seminar**

Title : Deformations of JT Gravity and Matrix Models

Speaker : Edward Witten (IAS, Princeton)

Date : Friday, July 17, 2020

Time : 05:30 pm

Abstract : Recently it was shown by Saad, Shenker, and Stanford that JT gravity in

two dimensions is dual not to any particular quantum system but to a random ensemble of quantum systems. I will explain that if one deforms JT gravity by adding a self-coupling of the scalar field, the resulting model is still dual to a random ensemble of quantum systems, with a different density of energy levels. I will also briefly describe work of Maxfield and Turiaci, who made a similar analysis in two dimensions and related it to

issues in three-dimensional gravity.

ICTS virtual : Please register at

seminar docs.google.com/forms/d/e/1FAIpQLSf0jLgoqiOgDnxbEBGiuIWiOmh9

WX8caH-pr13qDBZOO91lmg/viewform

(Links to join the seminars will be sent to your registered email address)

Recordings of past talks can be found here:

https://www.youtube.com/channel/UCw9LdPQ5t7Q7muD0gzn70TA