

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS String Seminar (HYBRID)

- Title : Deriving the Simplest Gauge-String Duality
- **Speaker** : Edward Mazenc (University of Chicago)
- **Date** : Wednesday, 05th June 2023
- **Time** : 03:00 PM (IST)
- Abstract : I will give an overview of our work with Prof. Gopakumar on deriving the closed string dual to the simplest possible gauge theory, a Hermitian matrix integral. These matrix theories are studied in the conventional 't Hooft limit, i.e. they do not require any further double-scaling. I'll present and verify an explicit operator dictionary between matrix traces and vertex operators in the closed topological string worldsheet descriptions. I will discuss the more general idea of open-closed-open triality which allows us to establish this dictionary. We will then sketch how the tools of Strebel differentials and topological recursion reveal the underlying mechanics of this open/closed string correspondence. I'll close by embedding our results in the broader context of AdS/CFT.
- Venue : Offline: Chern Lecture Hall (ICTS)

Online: Please click the below link to join the seminar.

https://icts-res-in.zoom.us/j/88092766911?pwd=R3ZrVk9yeW96ZmQ4ZG9KRzVhenRKZz09 Meeting ID: 880 9276 6911 Passcode: 232322