ICTS | INTERNATIONAL CENTRE for THEORETICAL SCIENCES

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS String Seminar

Title : Causal symmetry breaking: late time physics of holographic quantum chaos

Speaker : Julian Sonner (University of Geneva, Switzerland)

Date : Wednesday, 11th November 2020

Time : 03:00 pm (IST)

Abstract : Quantum chaotic systems are often defined via the assertion that their spectral statistics coincides with, or is well approximated by, random matrix theory. In this talk I will explain how the universal content of random matrix theory emerges as the consequence of a simple symmetry-breaking principle and its associated Goldstone modes. This approach naturally leads to wormhole-like correlations in holography, even for individual theories.

Finally I will comment on very recent results that allow us to extend the Goldstone effective-field-theory approach to operator correlation functions.

ICTS virtual seminar : Please register at https://docs.google.com/forms/d/e/1FAIpQLSf0jLgoqiOgDnxbEBGiuIWiOmh9WX8caH-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/UCw9LdPQ5t7Q7muD0qzn70TA