Seminar/Talk

Informal seminar with Lorenzo Piroli

Lorenzo Piroli
Max Planck Institute of Quantum Optics

Host: Maksym Serbyn

Scrambling and Chaos in Nonlocal Random Quantum CircuitsI will give an overview of recent results in the study of quantum chaos in non-local random unitary quantum circuits. After providing some motivations from high-energy and many-body physics, I will introduce the concepts of out-of-time ordered correlators (OTOCs) and of tripartite information as measures of scrambling and chaos. I will then focus on the study of nonlocal random circuits, and discuss a method to obtain numerically exact results for large system sizes. I will finally present a detailed study of two particular systems: a Brownian SYK model of all-to-all-interacting Majorana fermions, and a random circuit model for black hole evaporation, focusing on their most interesting physical aspects.Zoom Details:https://istaustria.zoom.us/j/91578921754?pwd=dWRJcGhwSHdLMklLQ0pCYnVWYjFZdz09Meeting ID: 915 7892 1754Passcode: 078930

Wednesday, June 30, 2021 03:00pm - 04:00pm
via Zoom

This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station. Please find a schedule of the ISTA Shuttle on our webpage: https://ista.ac.at/en/campus/how-to-get-here/ The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.