Contribution ID: **2**   Type: **not specified**

Universality of Heavy Operators in Matrix Models

Monday, December 1, 2025 11:30 AM (1 hour)

In large N theories with a gravity dual, generic heavy operators should be dual to black holes in the bulk. The microscopic details of such operators should then be irrelevant in the low energy theory. I will talk about a simple two matrix model – the Hoppe model – which also exhibits universality. Using analytics as well as Monte Carlo simulations, I will show that there exists a universal black hole regime where the eigenvalue densities are given by universal parabolas and the correlation functions of probes in these backgrounds are completely determined by a few parameters. The talk will be based on this paper arXiv:2507.21207

Presenter: MURALI, Harish

Session Classification: Session