Contribution ID: **29** Type: **not specified**

How to Build a Black Hole out of Instantons

Wednesday 17 January 2024 11:30 (30 minutes)

AdS/CFT has given a us a smorgasbord of holographic CFTs, from which we can try to learn about quantum gravity. Yet, access to dynamical observables is usually severely limited. We are thus motivated to study holographic models of quantum mechanics, which offer new routes to both analytic and numerical study. I will explain how quantum gravity emerges from the quantum mechanics of Yang-Mills instantons, and how we can construct black holes in the bulk dual. I will provide a precise microscopic derivation of the entropy of supersymmetric black holes in this model.

Presenter: MOULAND, Rishi (DAMTP, University of Cambridge)