The volume of the black hole interior at late times

Tuesday 27 July 2021 11:00 (45 minutes)

The volume of the interior of a two-sided eternal black hole classically grows forever. I will show that in JT gravity, summing the non-perturbative contribution of higher topologies leads to a saturation of the volume of the interior at times exponential in the entropy of the black hole. I will explain that this is evidence for the conjecture that the size of the interior is related to the complexity of the holographically dual quantum state.

Presenter: SAROSI, Gabor (CERN)