

## Theory: Quantum integrable black holes

*Thursday, September 7, 2023 3:00 PM (15 minutes)*

We consider black holes generically sourced by quantum matter described by regular wavefunctions. This allows for integrable effective energy densities and the removal of Cauchy horizons in spherically symmetric configurations. Moreover, we identify the ultrarigid rotation of the Kerr spacetime as causing the existence of an inner horizon in rotating systems, and describe general properties for quantum matter cores at the centre of rotating black holes with integrable singularities and no Cauchy horizon.

**Presenter:** GIUSTI, Andrea (ETH Zurich)

**Session Classification:** Parallel Sessions