

Contribution ID: 38

Type: Gong show talk (5 mins)

Quantum vortices and black hole superradiance

Thursday, 15 December 2022 15:00 (10 minutes)

Vortices in quantum fluids have discrete charges associated with their circulations. Higher charged quantum vortices have dynamical instabilities which arise from superradiant bound states inside the vortex core, resulting in vortex splitting. Remarkably, the rotational superradiance we expect to see around rotating black holes has the same physics behind it, allowing us to explore the analogy between black holes and draining quantum vortices even further.

Type of presentation

5 minute talk

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Black holes

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