

COLLOQUIUM

Black hole and stellar superradiance

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Abstract Superradiance is a powerful probe of Beyond the Standard model physics, generating the exponential build up of a bosonic field around a rotating star or black hole. Superradiance in black holes is reasonably well-understood but the superradiance in stars has received comparatively little attention. This is surprising given the ease with which we can observe isolated neutron stars and the array of signatures which would

result from stellar superradiance. I will discuss the opportunities and challenges of black hole and stellar superradiance and present the first systematic pipeline for computing superradiance rates in rotating stars.

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3.00 pm (CET)

Zoom link: <https://stockholmuniversity.zoom.us/j/2461001998>