

# Unveiling the formation of intermediate-mass black holes in dense star clusters with ET

*Tuesday 7 May 2024 10:00 (15 minutes)*

Intermediate-mass black holes (IMBHs) are elusive objects that may represent the link between stellar-mass (BHs) and supermassive black holes (SMBHs). The current scarce observational evidence of IMBHs in the mass range  $10^3$ - $10^4$  Msun leads to a natural question, are IMBHs a real category of BHs or, rather, do they represent exceptionally massive stellar BHs and light SMBHs?

In this talk, I will show how ET can place constraints on the mass spectrum of IMBHs and deliver crucial insights into the processes that regulate IMBH formation.

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