## BOSTON Boston University College of Arts & Sciences UNIVERSITY Institute for Astrophysical Research

2022-2023 ASTROPHYSICS SEMINAR SERIES

## Black holes and revelations:

unseen companions in stellar binaries

The Milky Way contains of order 10^8 stellarmass black holes (BHs). Yet, fewer than 100 BH candidates are known, and only about 20 are dynamically confirmed. Our view of the BH population has been shaped almost entirely by observations of X-ray binaries and gravitational wave sources, both of which represent an extremely rare outcome of binary evolution. I will discuss recent efforts to uncover the (potentially) much larger population of

Galactic black holes in non-interacting binaries, focusing both on interpretation of genuine dormant BHs and on what can be learned about binary evolution from the menagerie of interacting binaries and stripped stars that have masqueraded as dormant BHs binaries.



Monday, March 20th 3:30 - 4:30 p.m. <u>CAS 502</u>

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