



COMPACT BINARIES IN ASTROPHYSICAL ENVIRONMENTS

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Compact binaries represent the primary focus of contemporary gravitational wave detectors. However, their evolution can significantly deviate from the conventional vacuum scenario when situated within various environments, such as dark matter or accretion disks. In this presentation, we explore the impacts of binaries immersed in a medium. Specifically, we examine the effects of dynamical friction and accretion on eccentricity and center of mass velocity. Additionally, we delve into potential relativistic consequences arising from binaries interacting with bosonic field environments.