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Title: Testing the Kerr paradigm using strong gravitational lensing

Abstract: The image of M87* by the Event Horizon Telescope (EHT) has created a valuable opportunity to test the nature of Black Hole (BH) candidates in the cosmos. The Kerr hypothesis, which is motivated by multiple uniqueness theorems, states that astrophysical BHs are well described by the Kerr metric. However, alternative Kerr objects with possible astrophysical relevance can be constructed by circumventing these theorems. This talk will discuss the prospect of testing the Kerr hypothesis using shadow observations and lensing of the accretion flow around compact objects.