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Quasinormal modes of hairy black holes in scalar-tensor theories

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Various recent works have explored the emergence and properties of compact object solutions including black holes, in models with a metric tensor and a scalar field within the Horndeski framework of theories. Studying the quasinormal mode (QNM) spectrum of hairy black holes is particularly useful when considering the potential of observing hairy solutions in nature. In this talk we discuss how the QNMs of such solutions may actually deviate significantly from their General Relativity (GR) counterparts, allowing us therefore to potentially probe the validity of GR in the strong gravitational regime.

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