Department of
Theoretical Physics

The Quantum Space-Time Seminar

Rotating Black Holes Beyond General Relativity

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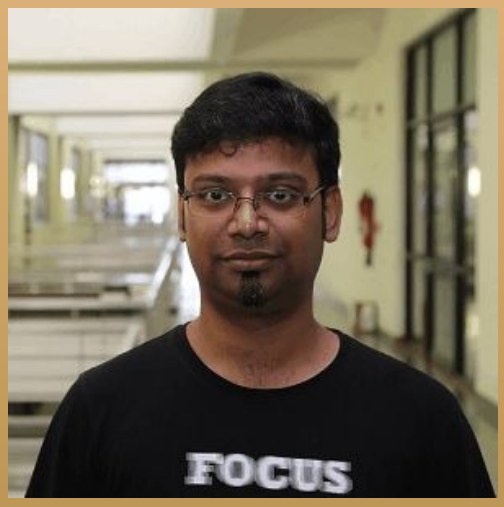
Mon, 16 Feb, 11:00am – 1:00pm, A 304

The zoom link will be sent separately.



Abstract: The uniqueness theorem states that in general relativity the Kerr spacetime is the unique vacuum, stationary, asymptotically flat black hole solution. This elegant property, however, need not hold in many extensions of general relativity. Across a wide range of modified gravity theories, the landscape of rotating black hole solutions can be substantially broader, and mapping out this landscape has become a highly active and fast-moving research frontier. In this talk I will review recent progress in characterizing these solutions and discuss the observational strategies that may uncover signatures of deviations from the Kerr geometry, should nature choose to depart from Einstein's theory.