University of Crete
Department of Physics

Physics Colloquium

Thursday, 10 October 2024 | 17:00 – 18:00, Seminar Room 3rd Floor

Expanding black hole cosmologies: On the non-linear stability of Kerr de Sitter spacetimes

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ABSTRACT

The Kerr de Sitter geometry models a rotating black hole in an expanding universe. I will review its stability properties in the context of the Einstein vacuum equations with positive cosmological constant, and present recent progress on the non-linear stability problem for the cosmological region. Among others, the talk describes contributions by H. Friedrich, P. Hintz and A. Vasy, and my recent joint work with Volker Schlue.