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(G*) Asymptotically Anti-de Sitter Gravitational Solitons

Monday, 7 June 2021 13:00 (3 minutes)

In this talk, I will consider the stability of asymptotically anti-de Sitter gravitational solitons. These are globally stationary, asymptotically (globally) AdS spacetimes with positive energy but without horizons. I will introduce my ongoing project investigating solutions of the linear wave equation in this class of backgrounds. I will provide analytical expressions for the behavior of the scalar field near the soliton bubble and at spatial infinity. The special BPS (supersymmetric) case will then be examined as an example of a solution where stable trapping occurs. This project is joint work with Dr. Hari K. Kunduri and Dr. Robie A. Hennigar.

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