

# Near-extremal Black Holes and Jackiw-Teitelboim Gravity

*Friday, 31 May 2019 15:00 (15 minutes)*

I will talk about the dynamics of near-extremal Reissner-Nordstrom black holes in four-dimensional asymptotically AdS space. Working in the spherically symmetric approximation, I will present results about the thermodynamics and the response of the system to a probe scalar field. I will present evidence that the dynamics in the low energy limit is very well captured by the two-dimensional Jackiw-Teitelboim (JT) theory of gravity. The reason behind the efficacy of JT gravity for near-extremal black holes can be understood based on symmetry principles. The talk is based on the paper arXiv:1802.09547.

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