



# Sommerfeld Theory Colloquium

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Higher-Spin Gravity and Higher-Spin Black Holes in Three Dimensions

Three-dimensional Einstein gravity has no local dynamical degree of freedom. Yet, it is far from being trivial when the cosmological constant is negative. (i) It admits black hole solutions. (ii) It easily allows for consistently interacting and tractable higher-spin extensions. (iii) It possesses remarkable asymptotic properties at infinity where an infinite-dimensional symmetry algebra emerges. These features make three-dimensional gravity a perfect "theoretical laboratory" in which to explore the conceptual issues related to (i), (ii) and (iii) in a simpler context. The talk will not only discuss three-dimensional gravity assuming no previous knowledge on the subject, but will also provide access to recent work where new results on points (i), (ii) and (iii) are developed.

Wednesday, 4 June 2014, 16:15h, Room A348/349, Theresienstr. 37/III