

APCTP SEMINAR

Seeley DeWitt Coefficients and Logarithmic entropy corrections for black holes in generalized Einstein-Maxwell theory

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ISM

November 24th (Wed.) 15:00 (KST)

Online via ZOOM

Logarithmic corrections to the entropy of different classes of black holes are interesting to study in the context of testing a quantum theory of gravity. These are special quantum corrections that are universal, most dominant, and entirely computable from low energy data (i.e., massless fluctuations and their coupling to the black hole background). Euclidean gravity approach has been successful in computing these corrections to extremal and non-extremal black hole entropy. One of the important ingredients for this approach is to calculate the Seeley-DeWitt coefficients of the kinetic operator of the massless fields in the black hole background. In this talk, we will discuss the computation of Seeley-DeWitt coefficients as well as the logarithmic corrections to the entropy of black holes in a generalized Einstein-Maxwell theory (minimally coupled to arbitrary numbers of additional massless scalar, vector, spin-1/2, and spin-3/2 fields).

■ ZOOM Webinar

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