Planck 2013
 <h2>From the Planck Scale to the Electroweak Scale</h2>

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Effective action in quantum gravity

Tuesday 21 May 2013 17:40 (15 minutes)

We present the formalism of computing one-loop effective action for quantum gravitation using non-local heat kernel methods. We find agreement with previous old results. In main part of my talk I consider the system of E-H gravitation and scalar fields. We are able to derive nonlocal quantum effective action up to the second order in heat kernel generalized curvatures. By going to flat spacetime expressions for gravitational formfactors are constructed and compared with the results from effective field theory for gravity.

Presenter: RACHWAL, Leslaw

Session Classification: Parallel Session on Formal BSM