Contribution ID: **503**   Type: **Parallel Sessions**

An Estimate of Lambda in Resummed Quantum Gravity in the Context of Asymptotic Safety and Planck Scale Cosmology: Constraints on SUSY GUTS

Thursday 5 July 2012 14:40 (15 minutes)

We use the amplitude-based resummation of Feynmans formulation of Einsteins theory to arrive at a UV finite approach to quantum gravity. We show that we recover the UV fixed point recently claimed by the exact field-space renormalization group approach. We use our approach in the context of the attendant Planck scale cosmology formulation of Bonanno and Reuter to estimate the value of the cosmological constant as \rho_\Lambda=(0.0024 ev)^4. We show that the closeness of this estimate to experiment constrains susy GUT models.

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Session Classification: TR 12 - Formal Theory Development & TR 1 - The Standard Model

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