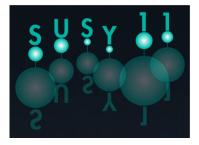
## Supersymmetry 2011 (SUSY11)



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## Constructing flat inflationary potentials in supersymmetry

Wednesday, 31 August 2011 14:40 (20 minutes)

We show that in supersymmetry one can obtain inflationary potentials that are sufficiently flat at sub-Planckian field values. Structure of the supersymmetric scalar potential combined with the existence of higher order terms in an effective field theory expansion allows to find potentials where any number of derivatives may vanish at a point below the effective field theory cut off. As an explicit example, we demonstrate that inflection point inflation within a broad range of scales can be accommodated with considerable amelioration of the fine tuning problem.

**Presenter:** Prof. ALLAHVERDI, Rouzbeh (University of New Mexico) **Session Classification:** Parallel Session 7