DISCRETE 2010



Contribution ID: 100

Type: not specified

Perspectives on Lorentz and CPT symmetry violation

Friday, 10 December 2010 09:00 (45 minutes)

In the last fifteen years, there has been a growing interest in the possibility that Lorentz and CPT symmetries may not be exact. Both string theory and loop quantum gravity suggest the possibility of Lorentz and CPT violations in certain regimes. An effective field theory has been developed to describe such violations: the standard model extension (SME). Many of the parameters in the SME are subject to stringent experimental constraints, and of particular interest are astrophysical constraints on Lorentz violations in the electron sector, which come from observations of the synchrotron and inverse Compton spectra of high-energy sources.

Presenter: Prof. ALTSCHUL, Brett (University of South Carolina) **Session Classification:** Plenary Session 7