The 4th UniverseNet School - Frontiers of Particle Cosmology



Contribution ID: 34 Type: not specified

Dr. TAVAKOLI, Farhad (Islamic Azad University, Tehran): The effect of self-force on a freely falling massive charged particle in de-Sitter universe

Friday, 17 September 2010 17:30 (15 minutes)

Observations coming from the astrophysical data indicate that we live in a expanding universe where its evolution is dominated by a small positive cosmological constant. Mathematically this model can be explained by the de Sitter space-time. In this work we study a freely falling massive charged particle in de Sitter space-time. However due to the effect of the charge and mass the particle exceeds from its geodesic. In this paper we want to consider these effects on the geodesic motion.

Session Classification: 6 talks (Chair: Konstantinos DIMOPOULOS)