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

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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.

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