



Contribution ID: 56

Type: Poster Sessions

Dark Energy Field Evolution and Masses of Objects formed by the Gravitational Collapse of Dark Energy Field Configurations

Saturday 7 July 2012 18:00 (1 hour)

Dark Energy is the dominant component of the Energy Density of the Universe. It is imperative to understand the gravitational dynamics of Dark Energy and its implications. The most promising candidate for dark energy is the energy density of fields in curved space-time. We describe the formalism to study the time evolution and gravitational dynamics of dark energy field configurations given any general potential for the dark energy fields. We apply this formalism to models of dark energy motivated by particle physics considerations. We explicitly study the time evolution of the energy density of the fields in addition to studying the dynamics of the fields themselves.

The study of the gravitational dynamics allowed us to demonstrate the gravitational collapse of dark energy field configurations. The study of the time evolution of the energy density allows us to compute the masses of objects formed by the gravitational collapse of dark energy field configurations. We will report on the masses of objects formed by the gravitational collapse of dark energy field configurations.

Summary

I request you to please make an early decision regarding my submission. I need to get approval for funding to travel to ICHEP which can only be granted if my talk is accepted for the conference. Thus my attendance and registration for the conference is pending the acceptance of the abstract for my talk. I had submitted my abstract when submissions opened and I request you to kindly make an early decision in my case for the reasons outlined above.

Thanks and best regards,
-Anupam.

Author: SINGH, Anupam (L.N.Mittal I.I.T. (IN))

Presenter: SINGH, Anupam (L.N.Mittal I.I.T. (IN))

Session Classification: Poster Session

Track Classification: Track 11. Particle Astrophysics and Cosmology