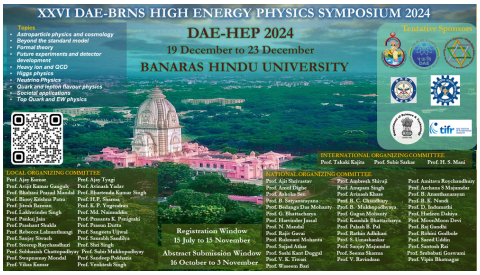

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Observational Methodologies for the Probable Detection of Cosmic Strings

Cosmic Strings are hypothetical energy densities arising from topological defects in the early universe. Despite various theoretical studies over the years, there has yet to be significant evidence of its existence. Cosmic Strings produce gravitational waves and cause gravitational lensing making these two methodologies the most studied upon. Theories have also suggested the decay of cosmic strings into particles making them another possible source of detection. Recent studies have focused on the interaction of cosmic strings with spinning black holes and have proposed that their spin reduces when attached to cosmic strings. This when considered in the case of an X-ray Binary system, directly affects the orbital period and a change in the accretion disk and hence are great methodologies for their detection.

Field of contribution

Theory

Author: SWAMY, Ishan

Presenter: SWAMY, Ishan

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