

## Universidade Federal da Paraíba Centro de Ciências Exatas e da Natureza Programa de Pós-Graduação *Stricto Sensu* em Física



## "Self-Gravitating Non-Abelian Flux Tubes"

RESUMO: Cosmic strings are thought to have been formed in the early universe during the phase transitions from the GUT era to our present Standard Model phase. If indeed exist, cosmic strings are expected to affect the CMB radiation in a way that could be observable with further improvements of observations. Cosmic strings have also smaller scale astrophysical signatures like lensing and production of ultrahigh energy cosmic rays. Most of the studies of cosmic string dynamics and their cosmological implications are based on the simplest "toy model" of the Abelian Higgs system. However, the realistic framework where cosmic strings are generated is of course non-Abelian. I will present some preliminary results of a research in this direction and point towards the next steps of study.

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16h00

Auditório da Pós-Graduação em Física (novo prédio)