

SEMPARIS – Séminaires en région parisienne

<http://string.lpthe.jussieu.fr/semparis/>

Astronomy and Cosmology at ENS

Mercredi 29 Janvier 2020, 16 :00

LPENS, Conf IV

Domaines : astro-ph

Titre : *Modelling the cosmic history of galactic magnetic fields*

Orateur : **Luiz Rodrigues (Radboud University, Nijmegen)**

Résumé : *Do all spiral galaxies exhibit coherent magnetic fields ? How are galactic magnetic fields amplified and maintained ? What is the distribution of field strengths ? How did this change with time ? In this talk, I address these questions using a model which computes the magnetic properties of a statistical sample of evolving galaxies. It employs a semi-analytic model of galaxy formation to produce realistic time-varying galactic properties and numerically solves the dynamo equations from the early universe until the present. I will also discuss what are the prospects for observationally constraining this and similar models using a range of tracers.*
