SEMPARIS – Séminaires en région parisienne

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

Cours

Jeudi 11 Mai 2017, 15 :00
LPTENS, LPTENS Library
Domaines : hep-th

Titre : *Recent developments in superstring field theory 1/3*

Orateur : **Harold Erbin (LPTENS)**

Résumé : *I will review some recent developments of type II and heterotic superstring field theory. The approach I will follow is due to Ashoke Sen and based on the construction of the open-closed bosonic string field theory by Zwiebach. Particular attention will be devoted to the three main challenges faced by superstring field theory : inclusion of the Ramond sector, removal of spurious singularities due to the superconformal ghosts and definition of a prescription for the off-shell amplitudes. The plan is the following : 1) motivations, divergences in (super)string theory and off-shell amplitudes ; 2) superstring field theory : gauge fixed and quantum action, construction of the Ramond sector 3) momentum representation of amplitudes, applications : unitarity, soft theorems*