

ICTS Postdoc/Graduate Student Seminar Series

Title : Monte Carlo for String Theory/M Theory

Speaker : Anosh Joseph, ICTS-TIFR, Bangalore

Date : Friday, January 20, 2017

Time : 11:15 AM

Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore

Abstract : The AdS/CFT correspondence or gauge theory-gravity correspondence is one of the most beautiful results that string theory has produced. This correspondence relates theories with gravity and theories without gravity through interesting dualities. In this talk I will describe how such dualities can be tested using Monte Carlo simulations of strongly coupled gauge theories known as supersymmetric Yang-Mills theories. Supersymmetric gauge theories can be simulated on a computer by discretizing them on a Euclidean spacetime lattice and using suitable algorithms. I will review the current status of the Monte Carlo simulations of supersymmetric gauge theories, which includes interesting insights into black holes and quantum gravity.

Note: This will be an ongoing biweekly seminar series (Fridays, 11:15 am) by the ICTS postdocs and graduate students