

## Colloquium

# Ambar Sengupta

Louisiana State University

Friday, November 21, 2014 at 3pm in Bell Hall 143

### A Stochastic Geometry from Quantum Yang-Mills Theory

Yang-Mills field theory governs the interaction between the fundamental particles of nature. The mathematical framework of this theory is geometric and involves the notion of parallel transport along loops. A quantum theory for this field in two dimensions leads to a probabilistic geometry. In this talk we will present an account of this theory and some of its long range goals.