



TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS Seminar

Title : Noise Kernel for self similar Tolman Bondi Metric: Fluctuations at Cauchy

Horizon

Speaker : Seema Satin, University of Maryland, College Park, United States

Date : Thursday, September 29, 2016

Time : 11:30 am

Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore

Abstract : In my talk I will present a recently obtained result, at the Cauchy Horizon

for self similar Tolman Bondi metric. It is based on two very different fields of study, namely the Complete Gravitational Collapse of massive stars and

Stochastic Semiclassical Gravity. This is the first application of stochastic

gravity to gravitational collapse and gives further directions for

investigations. I will present the basic formalism and the result, which

shows a new kind of divergence of quantum fluctuations at the CH for

naked singularity end state. This needs to be explained further and opens up

a new directions for study, which I will mention in the concluding remarks.

Email: academicoffice@icts.res.in Website: www.icts.res.in