



Self-Similar Gravitational Dynamics, Singularities and Criticality in 2D

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ABSTRACT

In the talk, I will discuss continuously self-similar gravitational dynamics in $1+1$ spacetime dimensions. I will show how the assumption of self-similarity fixes the form of the two-dimensional theory, two classes of which are well-known in the literature. I will discuss some exotic static solutions and how inclusion of matter fields leads to non-trivial dynamics. I will argue for the occurrence of singularities based on a simple feature of differential equations. Time permitting, I will also discuss numerical work relating to dynamics of matter field collapse.

VENUE

PAMU Seminar Hall
A.N. Kolmogorov Building,
ISI, Kolkata

DATE & TIME

29th December, 2022
04:00 PM



*Everyone is
invited to attend*

Head, PAMU