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Department of
Theoretical Physics

THE QUANTUM SPACETIME SEMINAR SERIES

Topological sigma models and fluid dynamics

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Date: February 8, 2016
Time: 11.30 am
Venue: A-304, TIFR

(Duration and Location are subject to irreducible jitter)

I focus on the question of how relativistic fluid dynamics should be thought of as a Wilsonian effective field theory emerging from Schwinger-Keldysh path integrals. Taking the basic principles of Schwinger-Keldysh formalism seriously, we are led to a series of remarkable statements and a broad programme relating relativistic fluid dynamics and topological sigma models. Apart from the intrinsic interest for this programme from the non-equilibrium field theory viewpoint, we will also emphasise its relevance to various fundamental questions in black hole physics.

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