tifr

Department of Theoretical Physics

THE QUANTUM SPACETIME SEMINAR SERIES

Tensor Models in d Dimensions

Shiroman Prakash
(DEI-Agra)

Date: April 23, 2018
Time: 11:30 am
Venue: A-304, TIFR

Tensor models define a new large ***N*** limit dominated by melonic diagrams. While it seems unlikely that theories with melonic dominance make sense in dimensions greater than ***1***, it seems important to confirm this by carefully exploring the range of possibilities for melonic CFT's, and their relationships to simpler large ***N*** theories based on vector or matrix degrees of freedom. In this context we will review some of the work on fermionic and bosonic tensor models in ***d*** dimensions over the last year. One positive outcome of these explorations is that it appears possible to study fermionic tensor models in ***1*** dimension at finite ***N*** via an epsilon expansion, starting from ***2-ϵ*** dimensions.

Infosys