ICTS Seminar

Title : Solving theories with a slightly broken higher spin symmetry

Speaker : Shiroman Prakash, Dayalbagh University, Agra

Date : Tuesday, May 30, 2017

Time : 2:30 PM

Venue : Madhava Lecture Hall, ICTS Campus, Bangalore

Abstract : This series of pedagogical lectures will focus on conformal field theories with a slightly broken higher spin symmetry in 3 dimensions. These form an interesting class of theories without supersymmetry that can be solved at strong coupling -- the canonical example of such theories are large N Chern Simons theories with vector matter. We will first review basic facts about CFT's in three dimensions, and then describe the method of Maldacena and Zhiboedov for solving these theories in a model-independent way. We will then show how to (based on work with Giombi, Gurcharan, Kirilin and Skvortsov) to derive the all-orders 1/N spectrum of higher spin operators in these theories. We will end by describing some open questions and works in progress in this area.