

## Area Seminar

Title Non-chiral bosonization of fermions

Date and Time 27/03/2014 16:00:00

Speaker Dr. Girish S. Setlur

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Area Theoretical Physics

Venue Room No. 469

Abstract In this talk, I describe the ongoing work in our group in recasting interacting fermion theories in a bosonic language with the aim of extracting asymptotically exact single particle Green functions. I describe the recent remarkable closed form expression of the Green function of a Luttinger liquid in presence of a single impurity (Kane Fisher problem). This talk will also introduce the concept of a non-local particle hole creation operator for both boson and fermion systems and point of their applications in computing the correlation functions.