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ICTS Seminar

: Thermal Correlators and Bosonisation Dualities in Large N Chern Title Simons Matter Theories Speaker : Sudip Ghosh, Okinawa Institute of Science and Technology Graduate University, Japan Date : Friday, June 7, 2019 : 11:00 AM Time Venue : Chern Lecture Hall, ICTS Campus, Bangalore : In recent years, certain class of large N quantum field theories Abstract in 3-dimensions involving Chern Simons gauge fields coupled to bosonic matter fields have been shown to be dual to theories with Chern Simons gauge fields coupled to fermions. In this talk I will discuss some aspects of this bosonisation duality at finite temperature. In particular I will describe the large N, and all orders in t'Hooft coupling, computation of the thermal 2-point function of several gauge invariant operators in these theories. These results provide additional new checks of the bosonisation dualities at finite temperature. I will also discuss some applications of our results for studying these theories via the conformal bootstrap approach at finite temperature.