ICTS Seminar

Title   :   Parity and the Modular Bootstrap

Speaker :   Tarek Anous, University of British Columbia, Canada

Date   :   Monday, 24 December 2018

Time   :   2:30 PM

Venue   :   Emmy Noether Seminar Room, ICTS Campus, Bangalore

Abstract :   We consider unitary, modular invariant, two-dimensional CFTs which are invariant under spatial parity flips. Applying parity and modular inversion symmetry to the partition function leads to a continuous family of fixed points of this transformation. We use this fixed locus to prove aconjecture of Hartman, Keller, and Stoica that the free energy of a large-c 2d CFT with a suitably sparse low-lying spectrum matches that of AdS3 gravity at all temperatures and all angular potentials. We also use the fixed locus to generalize the modular bootstrap equations, obtaining novel constraints on the operator spectrum.