

Physics Seminar: Rajeev Erramelli
Wednesday, September 3 · 2:00 – 3:00pm

Location: 313

Title: Bootstrapping the 3d Ising Stress Tensor

Abstract: We compute observables of the 3d Ising CFT to high precision by applying the numerical conformal bootstrap to mixed correlators of the leading scalar operators σ and ϵ as well as the stress tensor $T_{\{\mu\nu\}}$. We obtain new precise determinations of scaling dimensions $(\Delta_\sigma, \Delta_\epsilon) = (0.518148804(12), 1.41262527(16))$ as well as OPE coefficients involving σ , ϵ , and $T_{\{\mu\nu\}}$. In addition, I will present preliminary non-rigorous data on more of the 3D Ising CFT spectrum such as determined by the extremal functional method (EFM). Based on 2411.15300 and ongoing work.