

Physics Theory Seminar

Monday, March 5, 2018 / Pupin Hall Theory Center, 8th Floor / 11:15 AM

"Bootstrapping the Stress-Energy Tensor"

David Poland, Yale University



I will discuss recent progress at extending the conformal bootstrap to 4-point functions containing the stress-energy tensor. This progress includes deriving analytical sum rules for the coefficients in stress-tensor 3-point functions and producing numerical bounds on these coefficients in 3D CFTs for various gaps in the spectrum. In the latter analysis we obtain the first determination of the stress-tensor 3-point function and parity-odd gap in the critical 3D Ising model.