

Precise critical exponents from Conformal bootstrap

Monday, 5 September 2016 15:00 (1 hour)

Originally formulated in the 70's, the conformal bootstrap is the ambitious idea that one can use internal consistency conditions to carve out, and eventually solve, the space of conformal field theories. In this talk I will review recent developments in the field which have boosted this program to a new level.

I will present a method to extract quantitative informations in strongly-interacting theories, such as 3D Ising, $O(N)$ vector model and even systems without a Lagrangian formulation. I will explain how these techniques have led to the world record determination of several critical exponents.

Presenter: Prof. VICHI, Alessandro ((Cern, Geneva))