



University of Crete
Department of Physics

Physics Colloquium

Thursday, 7 March 2019 | 17:00 – 18:00, Seminar Room, 3rd floor

Renormalization Group and Conformal Bootstrap: Friends or Foes?

Prof. Slava Rychkov

Institut des Hautes Études Scientifiques, Bures-sur-Yvette and École Normale Supérieure, Paris, France

ABSTRACT

For almost 50 years Renormalization Group has been the workhorse of the theory of critical phenomena such as the liquid-gas critical point or the Curie temperature of a ferromagnet (Ising model). In the last 10 years a new method called the Conformal Bootstrap has been making significant progress. We will review the story of this friendly competition, and the main challenges faced by the two approaches.