



Sommerfeld Theory Colloquium

Prof. David Berenstein

UC Santa Barbara

Thinking positively: the numerical quantum mechanical bootstrap

I will describe recent developments on the (numerical) computation of energy levels of various systems by the quantum mechanical bootstrap. The main way the bootstrap works is by using constraints that arise from positive matrices. Part of the goal is to turn the bootstrap problem into a problem that can be solved by semi-definite programming methods. I will describe how this method leads to solutions of the spectrum of various systems and will describe some additional applications of this way of solving problems to the study of quantum spin chains.

Wednesday, 3 July 2024, 16:15h, Room A348, Theresienstr. 37/III

Prof. I. Sachs