



Department of
Theoretical Physics

THE QUANTUM SPACETIME SEMINAR SERIES

Some functional aspects of the conformal bootstrap

(Zoom Seminar)

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(DESY)

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Time: 11 AM IST

Zoom link shall be shared separately



The conformal bootstrap is a powerful tool in the study of CFTs. In recent years it has been shown that it has a very efficient implementation through a special basis of conformal blocks, called Analytic functionals. They rely on the analytic and Regge boundedness properties of CFT correlators, and have an interesting connection to AdS Witten diagrams ('Polyakov blocks') and CFT dispersion relations. I will give an introduction to 1d Analytic functionals. I will then discuss some of its generalizations in the contexts of general global symmetry, higher even d and multiple correlators. I will also discuss some exciting results such as analytic bounds on OPE data, numerical results in 3d Ising twist defect and bounds on a correlator of charged scalars.

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