



Department of
Theoretical Physics

THE QUANTUM SPACETIME SEMINAR SERIES

The simplest problem in conformal bootstrap

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I will discuss recent results in conformal bootstrap which makes use of crossing symmetric building blocks called Polyakov blocks. The simplest bootstrap problem can be framed in 1 dimension, i.e., conformal quantum mechanics, where the contact term ambiguity in the basis can be fixed. I will show how the resulting equations can be solved around the generalized free field solution to any order in perturbation theory and discuss some observations about the anomalous dimensions. The resulting solutions are predictions for diagrammatic calculations in AdS_2 where only 1-loop results exist.