



Department of
Theoretical Physics

THE QUANTUM SPACETIME SEMINAR SERIES

Constraints on CFTs in large dimensions

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Date : 14th January, 2019

Time : 11.30 am

Venue: A-304, TIFR



I'll constrain the space of CFTs in large dimensions using crossing symmetry and unitarity, assuming the existence of stress tensor. Lagrangian based arguments lead us to suspect that there are no non-trivial CFTs in dimensions greater than 6. I'll analyze the above constraints starting from infinite D , in $1/D$ perturbation theory. At leading order I'll show that there are no non-trivial CFTs in large D . It is expected that this conclusion persists at the sub-leading order.