

3d and 5d gauge theory partition functions as q-deformed CFT correlators

Friday, 29 March 2013 09:00 (40 minutes)

In this talk I will discuss few relations between gauge theory partition functions and CFT correlators. In particular, I will define a class of q-deformed CFT correlators where conformal blocks are controlled by a deformation of Virasoro symmetry and I will show how three-point functions can be derived exploiting the bootstrap approach. It results that q-deformed degenerate correlators can be mapped to 3d partition functions while non-degenerate q-deformed correlators are related to 5d partition functions. I will describe how these results are consistent with the interpretation of certain 3d gauge theories as codimension two defect theories inside 5d theories.

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