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Computation of the anomalous dimension of ABJM theory

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Abstract content
 (Max 300 words)

We discuss the computation of the anomalous dimension (in the large N, but non-planar limit) of a (2+1)dimensional conformal field theory (CFT) that is dual to 4-dimensional gravitational theory on anti-de Sitter (AdS) space. In CFTs, a basic observable is the conformal dimension rather than the S-matrix. This conformal dimension is a combination of the classical mass dimension and a quantum correction. It is this quantum correction, otherwise known as the anomalous dimension, whose computation will be discussed in this talk. The calculation employs group representation theory as developed in recent work.

Apply to be
 consider for a student
 award (Yes / No)?

No

Level for award
 (Hons, MSc,
 PhD)?

PhD

Main supervisor (name and email)
and his / her institution

Professor Robert de Mello Koch

Would you like to
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No

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