SEMPARIS – Séminaires en région parisienne

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Seminaire du LPTENS

Mardi 6 Juin 2017, 11 :00
LPTENS, LPTENS library
Domaines : hep-th

Titre : *AdS3 at the String Scale*

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Résumé : *String theory on AdS3 is studied from the world-sheet perspective, using the description in terms of a WZW model based on sl(2,R). We identify the leading Regge trajectory states and show that they have the structure of a higher spin Vasiliev theory. We also explain that for the minimal level (corresponding to the situation with a single NS 5-brane) the spacetime theory has a stringy tower of massless higher spin fields which are part of a continuum of light states.*

For the case of AdS3 x S3 x S3 x S1 we use similar techniques to determine the BPS spectrum of the spacetime theory. Our result suggests that the supergravity BPS spectrum is different than previously thought, as we also verify explicitly. This new insight opens the door towards identifying the CFT dual of string theory on this background.