



An AdS_3 Dual for Minimal Model CFTs

http://www.firstlight.cn 2010-11-30

We propose a duality between the 2d W_N minimal models in the large N 't Hooft limit, and a family of higher spin theories on AdS_3. The 2d CFTs can be described as WZW coset models, and include, for N=2, the usual Virasoro unitary series. The dual bulk theory contains, in addition to the massless higher spin fields, two complex scalars (of equal mass). The mass is directly related to the 't Hooft coupling constant of the dual CFT. We give convincing evidence that the spectra of the two theories match precisely for all values of the 't Hooft coupling. We also show that the RG flows in the 2d CFT agree exactly with the usual AdS/CFT prediction of the gravity theory. Our proposal is in many ways analogous to the Klebanov-Polyakov conjecture for an AdS_4 dual for the singlet sector of large N vector models.

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