

"Spectrum for  $Y=0$  brane in planar AdS/CFT"

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Abstract

The spectrum of open string states in  $AdS_5 \times S^5$  is revisited from an integrability point of view. It is believed that open strings ending on the maximal giant graviton branes are dual to determinant-like gauge-invariant operators in  $N=4$  super Yang-Mills theory.

Since the maximal giant graviton brane provides an integrable boundary condition for the open string, methods of boundary integrable systems are applicable in order to compute finite-size corrections to the asymptotic spectrum of the open string states.

We conjecture that the exact spectrum of these states is described by the same  $Y$ -system as in the periodic case with different analyticity conditions.