

Spin-2 excitations in Gaiotto-Maldacena solutions

Tuesday, 4 June 2019 17:00 (45 minutes)

In this talk, I will present the results for the computation of the spin-2 excitations for a class of $N=2$ supersymmetric solutions of type IIA supergravity found by Gaiotto and Maldacena. The mass spectrum of these excitations can be derived by solving a second order partial differential equation. In our work, we consider as specific examples the Abelian and non-Abelian T-dual versions of $AdS_5 \times S^5$ and we study the mass spectra. For the modes that do not 'feel' the non-Abelian T-duality transformation, we can provide analytical formulas for the masses, while for the rest we can only derive the spectra numerically. The numerical values that correspond to large masses are compared with WKB formulas. We also find a lower bound for the masses.

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