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Type: **Parallel Talk** $cN = 2^*$ (non-)Abelian theory in the Ω -background from String theory*Saturday, July 8, 2017 11:50 AM (20 minutes)*

We present a D-brane realisation of the (non-)Abelian $N = 2^*$ theory. For Ω deformation we compute suitable topological amplitudes in this setup. These amplitudes are expressed as a double series expansion. The coefficients determine couplings of higher-dimensional operators in the effective supergravity action that involve powers of the anti-self-dual $N = 2$ chiral Weyl superfield and of self-dual gauge field strengths superpartners of the D5-brane coupling modulus. In the field theory limit, as it is expected, the result reproduces the Nekrasov partition function in the two-parameter Ω -background.

Experimental Collaboration

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