



Contribution ID: 685

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

Primary authors: Dr SAMSONYAN, Marine (CERN); Prof. ANGELANTONJ, Carlo (University of Torino); Prof. ANTONIADIS, Ignatios (LPHE, CNRS UMR 7589, Albert Einstein Center for Fundamental Physics, ITP)

Presenter: Dr SAMSONYAN, Marine (CERN)

Session Classification: QFT and string theory

Track Classification: Quantum Field and String Theory