

N=2 instanton effective action in Omega-background from superstrings

Monday 23 August 2010 17:54 (15 minutes)

We derived the instanton effective action of N=2 super Yang-Mills theory deformed by generic Omega-background. In the string theory context, the instanton effective action is computed as the D-instanton moduli effective action of fractional D3/D(-1)-brane system and Omega-background deformation to the instanton effective action can be realized as the effect of appropriate constant RR 3-form background. We also obtained the deformed supersymmetry of the deformed instanton effective action, which is interpreted as the BRST operator of the action.

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Session Classification: Formal 23-2 Chair: I. Klebanov

Track Classification: Formal