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## Instanton counting in BCD-type gauge theories

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Localization method together with ADHM construction provide a powerful way to compute the exact partition function of 8 SUSY gauge theories. In particular, Nekrasov's partition function is interesting because of the non-perturbative corrections from instantons. It is, however, known to be difficult to perform the integrals in an analytic way that appear in the computation of instanton partition functions of BCD-type gauge theories. In this talk, we propose an analytic expression for these integrals in the unrefined limit in the form of summation over Young diagrams. Our results are inspired by the topological vertex formalism in topological string theory.

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