

Conformal limit in $4D$ gauge theory

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Abstract

We study the conformal limit of the $4D$ gauge theory with $SU(2)$ gauge group. We consider the $4D$ gauge theory with $SU(2)$ gauge group and construct the conformally invariant conformal limit of the $4D$ gauge theory. There are two conformally invariant conformal limits in $4D$ gauge theory. In the first limit, the superconformal boundary condition is satisfied. In the second limit, the conformally invariant conformal boundary condition is violated.