

## **Abstract**

Perturbative corrections to the  $N=1/2$  supersymmetric  $U(N)$  gauge theory at one-loop order are studied. It is shown that whereas the quantum corrections to  $N=1$  sector of the theory are not affected by the  $C$ -deformation, the non(anti)commutativity parameter  $C$  receives one-loop perturbative corrections. These perturbative corrections are computed by performing an explicit one-loop calculation of the three and four-point functions of the theory. The running of the non(anti)commutativity parameter  $C$  is also studied using an appropriate Callan-Symanzik equation.