K-TWISTED EQUIVARIANT K-THEORY
FOR SU(N)

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Abstract
The motivation of this work is to understand the geometric model of (twisted) K-theory. Here we presented a version of twisted equivariant K-theory-K-twisted equivariant K-theory, and use Grothendieck differentials to compute the K-twisted equivariant K-theory of simple simply connected Lie groups. We did the calculation explicitly for SU(N) explicitly. The basic idea is to interpret an equivariant gerbe as an element of equivariant K-theory of degree 1.