Higher twisted K-theory of Lie Groups

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Twisted K-theory is a variant of topological K-theory that allows local coefficient systems called twists. For spaces and twists equipped with an action by a group, equivariant twisted K-theory provides an even finer invariant. Equivariant twists over Lie groups gained increasing importance in the subject due to a result by Freed, Hopkins and Teleman that relates the corresponding K-groups to the Verlinde ring of the associated loop group. In this talk I will discuss an operator-algebraic model for equivariant non-classical twists over the group SU(n) and quotients by its centre induced by exponential functors on the category of vector spaces and isomorphisms. This is joint work with D. Evans.