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Robin Stoll, University of Stockholm

<u>TITLE</u>
The stable cohomology of automorphisms of connected sums of S^k x S^l

<u>ABSTRACT</u>
I will explain an identification of the stable cohomology of the classifying spaces of homotopy automorphisms and of block diffeomorphisms of connected sums of S^k x S^l (relative to an embedded disk), where 2 < k < l < 2k-1. The results are expressed in terms of versions of Lie graph complex homology, the construction of which I will recall.
This also leads to a computation, in a range of degrees, of the stable cohomology of the classifying spaces of diffeomorphisms of these manifolds. In the case l = k+1, this recovers and extends recent results of Ebert--Reinhold.