

# Homotopy self-equivalences of manifolds

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## **Abstract**

To calculate the group of homotopy self-equivalences of a 4-manifold, Hambleton and Kreck established a commutative braid of exact sequences. In this talk, first we explain how to extend the above mentioned braid to particular manifolds of arbitrary dimension. Then we use our braid to classify spin 6-manifolds whose fundamental group is either a free group or is isomorphic to the fundamental group of a closed, oriented surface.