

# Seminar

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## On the Grothendieck groups of equivariantized fusion categories

Friday, February 14, 2014

at 11:00 h

ESI, Boltzmann Lecture Hall

**Abstract:** We describe a Mackey type decomposition for group actions on abelian categories. In the case of an action by tensor autoequivalences the Mackey functor at the level of Grothendieck rings has a Green functor structure. As an application we give a description of the Grothendieck rings of equivariantized fusion categories under group actions by tensor autoequivalences on graded fusion categories. It is shown that these Grothendieck rings have a ring structure similar to the (double) Burnside rings of finite groups and some other rings obtained by Bouc and Witherspoon.

J. Fuchs, L. Katzarkov, N. Reshetikhin, C. Schweigert

January 28, 2014