Oberseminar Topologie: 26.06.2017

## Christoph Winges (MPI Bonn)

"Algebraic K-theory and infinite products."

## Abstract:

The compatibility of the algebraic K-theory functor with infinite products is an important ingredient in proofs of the split-injectivity of the K-theoretic assembly map. Carlsson gave a proof of this fact by exploiting certain properties of the simplicial sets arising from Waldhausen's S.-construction. I will present an entirely K-theoretic proof of Carlsson's theorem for exact categories which relies on Grayson's description of higher algebraic K-theory via binary acyclic complexes. This is joint work with Daniel Kasprowski.