

Topology Seminar

Zhouli Xu

of MIT will be speaking on

Stable stems and the Chow-Novikov
t-structure in motivic stable homotopy
category

on May 4 at 4:30 in
MIT Room 2-131

In this talk, I will discuss recent progress on the computation of classical stable homotopy groups of spheres, and highlight some new results regarding certain Adams differentials and their connections to the Kervaire invariant classes. These computations use the Chow-Novikov t-structure on the cellular motivic stable homotopy theory over \mathbb{C} in an essential way. I will also discuss a recent result that extends this t-structure to the non-cellular part of the category which holds over any field, and its potential applications in computations.

This talk is based on several joint projects involving Tom Bachmann, Robert Burklund, Bogdan Gheorghe, Dan Isaksen, Hana Jia Kong and Guozhen Wang.

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