

Oberseminar Topologie: 29.06.2020

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„ Norms of real bordism and Eilenberg--MacLane spectra.“

Abstract:

Norms of real bordism are equivariant spectra that were introduced by Hill, Hopkins and Ravenel in their solution of the Kervaire invariant 1 problem. They have moreover become a key tool in chromatic homotopy theory. Computationally there remain many challenges though. I will report on joint work with Mingcong Zeng and Danny Shi connecting norms of real bordism with another computational problem: Computing the fixed points for the  $C_2$ -permutation action on the smash product of  $HF_2$  with itself (the dual Steenrod algebra spectrum). This in turn is related to the Segal conjecture.