

Topology Seminar

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of University of Bergen and MIT will be speaking on

Towards $TC(MU)$

on March 10 at 4:30 in
MIT Room 2-131

Given a ring spectrum R , there is an associated algebraic K-theory spectrum $K(R)$. In general $K(R)$ is very hard to compute; one method for approaching it is to use the cyclotomic trace map to topological cyclic homology, $TC(R)$. This map turns out to be a good approximation in many cases, and $TC(R)$ can be calculated provided one has a good grasp on the various cyclic fixed points of the topological Hochschild homology spectrum, $THH(R)$.

In this talk I will focus on the case where R is the complex cobordism spectrum MU . In this case computing $TC(MU)$ essentially reduces to computing the circle-Tate construction on $THH(MU)$. I will describe and build on previous homological computations to study the Adams spectral sequence of the circle-Tate construction on $THH(MU)$. This is work in progress.