

# Topology Seminar

## Hakon Bergsaker

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.