1143-55-131 **Andrew Blumberg**, **Teena Gerhardt*** (teena@math.msu.edu), **Michael Hill** and **Tyler Lawson**. *Hochschild homology for Green functors.*

Hochschild homology of a ring has a topological analogue for ring spectra, topological Hochschild homology (THH), which plays an essential role in the trace method approach to algebraic K-theory. For a C_n-equivariant ring spectrum, one can define C_n-relative THH. This leads to the question: What is the algebraic analogue of C_n-relative THH? In this talk, I will define twisted Hochschild homology for Green functors, which allows us to describe this algebraic analogue. This also leads to a theory of Witt vectors for Green functors, as well as an algebraic analogue of TR-theory. (Received August 06, 2018)