

Topology Seminar

Mike Mandell

of Indiana University will be speaking on

The strong Kunneth theorem for periodic topological cyclic homology

on March 13 at 4:30 in
MIT Room 2-131

Hesselholt has recently been advertising “periodic topological cyclic homology” (TP) as potentially filling some of the same roles for finite primes as periodic cyclic homology plays rationally. It is constructed from topological Hochschild homology (THH) analogously to the way periodic cyclic homology is constructed from Hochschild homology. In joint work with Andrew Blumberg, we prove a strong Kunneth theorem for the periodic topological cyclic homology of smooth and proper dg categories over a finite field k , namely, the derived smash product $TP(X) \wedge_{TP(k)} TP(Y)$ is weakly equivalent to $TP(X \otimes_k Y)$.