

Topology Seminar

Elden Elmanto

of Harvard University will be speaking on

Trace methods for algebraic stacks.

on May 17 at 4:30 in
MIT Room Zoom

We extend the Dundas-Goodwillie-McCarthy theorem concerning the fiber of the cyclotomic trace map from K theory to topological cyclic homology, to the context of stable categories. Our main tool is Bondarko's theory of weight structures. Applications include a new proof of cdh-descent for homotopy K-theory of stacks (Hoyois-Krishna) and new cases of Blanc's lattice conjecture in noncommutative Hodge theory (ala Katzarkov-Kontsevich-Pantev). Time permitting, I will speak about vistas, including the (equivariant) K-theory of the equivariant sphere and p-adic Hodge theory for stacks.

This is all joint work with Vova Sosnilo and partly based on <https://arxiv.org/abs/2010.09155>

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