Topology Seminar

Kyle Ormsby

of MIT will be speaking on

Tate Normal Form in Level Resolutions of the $K(2)$-Local Sphere

on October 31 at 4:30 in
MIT Room 2-131

The $K(2)$-localization of the sphere spectrum admits a conjectural small resolution built from TMF and "TMF with level structures" — the evaluation of the TMF sheaf on the stack of elliptic curves equipped with an order l subgroup. In this talk, I will use variations on Tate normal form to describe several Hopf algebroids that stackify to elliptic curves with level structure. These Hopf algebroids lead to computations of the Behrens-Lawson spectrum $Q(l)$. This is current work with Mark Behrens, Nat Stapleton, and Vesna Stojanoska.