Topology Seminar

Gereon Quick

of WWU Muenster will be speaking on

Some applications of profinite homotopy theory

on October 5 at 4:30 in
MIT Room 2-131

The playing field of profinite homotopy theory is provided by the homotopy categories of profinite spaces and profinite spectra. A motivating application is the connection to algebraic geometry. For example the etale fundamental group and continuous etale cohomology of a scheme can be defined in a unified way using a profinite etale realization functor. We will discuss this functor and use it to define etale topological cobordism. But it turned out that profinite structures might be useful in other areas such as Lubin-Tate spectra. If time permits we will discuss this idea in progress as well.