Oberseminar Topologie: 08.12.2021

Elden Elmanto (IMJ Paris)

"Motivic cohomology reimagined "

Abstract:

We construct a cohomological theory of (higher) algebraic cycles on singular schemes using the relationship with (higher) algebraic K-theory as a guiding principle (think Riemann-Roch). In equicharacteritics, this theory is controlled by dlog forms, while in mixed characteristics, this theory is controlled by Bhatt-Scholze's prismatic theory. This is joint work with Tom Bachmann and Matthew Morrow