

Algebraic K-Theory Seminar

The derived Riemann-Hilbert correspondence

Mauro Porta (University of Pennsylvania)

Abstract: In this talk I'll explain how to use ideas from derived analytic geometry to solve a conjecture of Simpson, extending the Riemann-Hilbert correspondence to perfect complexes. The method proposed allows to prove a better result: namely, we prove that the Riemann-Hilbert correspondence remains true in families parametrized by derived bases. Possible applications to nonabelian Hodge theory will be discussed. This talk is based on the preprint arXiv 1703.03907.

Wednesday, April 19 at 1:00 PM in SEO 1227