

Algebraic K-Theory Seminar

The derived Riemann-Hilbert correspondence

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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](https://arxiv.org/abs/1703.03907).

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