

Motivic realizations of categories

Friday, October 23, 2015 2:00 PM (50 minutes)

This is a report on a work in progress with Robalo and Vezzosi. I will present the construction of a motivic realization of (dg-)categories over base of arbitrary characteristics, based on some previous work by A. Blanc. This will be used in order to define various realizations of categories, l-adic, de Rham, Betti etc, recovering the usual realizations when applied to the derived category of an algebraic variety.

As a consequence I will present an extension of p-adic Hodge theory to the non-commutative setting, as well as a new relations between vanishing cycles and categories of matrix factorizations in positive and mixed characteristics.

Primary author: TOËN, Bertrand (CNRS et Toulouse)

Presenter: TOËN, Bertrand (CNRS et Toulouse)

Track Classification: TopAlg