

# Topology Seminar

## Martin Speirs

of Harvard University will be speaking on

## Bass' NK-groups and arithmetic invariants

on November 30 at 4:30 in  
MIT Room Zoom

In the 1970s Quillen proved that algebraic K-theory is homotopy invariant for a regular noetherian base. For a non-regular base ring this is not true. Bass defined the NK-groups in order to study the failure of homotopy invariance in K-theory. In general these groups are not well understood, though they have many interesting properties. Ten years ago, Cortiñas, Haesemeyer, Walker and Weibel used cdh-descent methods to understand the NK-groups when the input is rational. In this talk I will explain parts of their work and discuss ongoing work with Elden Elmanto where we aim to extend their methods to the mixed characteristic setting.

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