

# ALGEBRAIC K-THEORY AND THE UNSTABLE HOMOLOGY OF GENERAL LINEAR GROUP

ALEXANDER KUPERS

Abstract: The stable homology of general linear groups over a field is well-known to be closely related to its algebraic K-theory. I will discuss joint work with Soren Galatius and Oscar Randal-Williams which investigates the unstable homology of general linear groups. We will find it is closely related to the Milnor K-theory, by constructing a presentation of the disjoint union of  $BGL_n(\mathbb{F})$  as an  $\mathbf{E}_\infty$ -algebra.