

Meeting: 998, Houston, Texas, SS 19A, Special Session on Algebraic Geometry

998-14-234 **Pedro F. dos Santos** (pedfs@math.ist.utl.pt), Department of Mathematics, Instituto Tecnico Superior Lisbon, Portugal, and **Paulo Lima-Filho*** (plfilho@math.tamu.edu), Department of Mathematics, Texas A&M University, College Station, TX 77843. *Representing twisted algebraic K-theory with generalized Grassmannians*. Preliminary report.

Given an element $\alpha \in Br(k)$ in the Brauer group of a field and a scheme X over k , one can define K -theory groups $K_i^\alpha(X)$ using the category of locally free sheaves on X with the structure of A -algebra, where A is a central simple algebra representing α . We study properties of this K -theory, such as pairings compatible with the multiplication in the Brauer group and, using generalized Grassmannians associated to A , we study the representation of this theory in Morel-Voevodsky's \mathbb{A}^1 -homotopy category. (Received February 28, 2004)