

1063-14-118

Aravind Asok* (asok@usc.edu), Department of Mathematics KAP 108, 3620 S. Vermont Ave, Los Angeles, CA 90089, and **Christian Haesemeyer** and **Fabien Morel**. *Stable \mathbb{A}^1 -homotopy theory and rational points.*

I will discuss obstructions to existence of rational points on smooth proper algebraic varieties arising from the Morel-Voevodsky stable \mathbb{A}^1 -homotopy theory. These obstructions are a byproduct of a computation of the 0-th stable \mathbb{A}^1 -homotopy sheaf of a smooth proper variety in terms of what are called “oriented 0-cycles.” (Received August 11, 2010)