Meeting: 1001, Evanston, Illinois, SS 18A, Special Session on Applications of Motives

1001-14-117 Marc Levine* (marc@neu.edu). Motivic tubular neighborhoods. Preliminary report.

We show how to construct a cycle complex for the punctured tubular neighborhood of a normal crossing divisor on a smooth variety. As one application, we define a specialization functor from the category of mixed Tate motives over the quotient field of a DVR to the category of mixed Tate motives over the residue field. A specialization functor of this type has already been defined by Spitzweck, and more recently by Ayoub, using different methods. (Received August 18, 2004)