Grace K. Lyo* (gracelyo@math.mit.edu), Department of Mathematics, 77 Massachusetts Avenue, Massachusetts Institute of Technology, Boston, MA 02139. The ℓ-adic K-theory of a p-local field.

I will describe a conjecture of Carlsson's that provides an explicit model of the homotopy type of the completed algebraic K-theory spectrum $(KF)_{\ell}$ of an arbitrary field F. This is achieved using exclusively the semilinear representation theory of the absolute Galois group G_F . The conjecture is known to hold in two special cases; in this talk I will outline the proof of the most recently established case. (Received September 02, 2008)