1035-17-1052 **Dijana Jakelic*** (dijana@math.uic.edu), Department of Mathematics, Statistics, and Computer Science (M/C 249), 851 S. Morgan Street, Chicago, IL 60607-7045, and Adriano A. Moura (aamoura@ime.unicamp.br), UNICAMP-IMECC, Campinas, SP 13083-970, Brazil. Weyl modules for hyper loop algebras.

We consider finite-dimensional representations of hyper loop algebras over an algebraically closed field of positive characteristic. Hyper loop algebras are certain Hopf algebras associated to affine Kac-Moody algebras. We will present the results on the classification of the irreducible modules, a version of Steinberg's Tensor Product Theorem, and the construction of positive characteristic analogues of the Weyl modules as defined by Chari and Pressley in the characteristic zero setting. We will also talk about reduction modulo p and a conjecture saying that the Weyl modules of a hyper loop algebra are the reduction modulo p of suitable characteristic zero Weyl modules. (Received September 18, 2007)