

1112-20-421

Jessica Fintzen* (fintzen@math.harvard.edu). *Stable vectors in the Moy-Prasad filtration.*

Reeder and Yu gave recently a new construction of certain supercuspidal representations of p -adic reductive groups (called epipelagic representations). Their construction relies on the existence of stable vectors in the first Moy-Prasad filtration quotient under the action of a reductive quotient. We will explain these ingredients and present a theorem about the existence of such stable vectors for all primes p . This builds on a result of Reeder and Yu about the existence of stable vectors for large primes.

The above work forms part of a joint research project with Beth Romano. (Received August 10, 2015)