Clifton Cunningham and Julia Gordon* (gor@math.ubc.ca), Department of Mathematics, University of British Columbia, 121-1984 Mathematics Rd., Vancouver, BC V6M 1T7, Canada, and Loren Spice. Characters are motivic near the identity.

It is known that Harish-Chandra characters of depth-zero representations are "motivic" near the identity, in the sense that their values can be recovered by counting points on affine varieties over finite fields, and the equations defining these varieties are algorithmically computable. I will describe how to use the character formulae of J. Adler and L. Spice, and the parametrization of good orbital integrals described in C. Cunningham's talk to show that Harish-Chandra characters of a class of very supercuspidal representations of positive depth are motivic, near the identity. This is joint work with C. Cunningham and L. Spice. (Received August 03, 2007)