1123-11-29 Ian Whitehead* (iwhitehe@umn.edu). Whittaker functions for affine Kac-Moody groups.

I will discuss recent progress on constructing local Whittaker functions for affine and metaplectic affine Kac-Moody groups. These constructions generalize the Casselman-Shalika formula and Weyl group multiple Dirichlet series for finite-dimensional groups. The new ingredient is a factor which takes the form of an infinite product over imaginary roots in the affine root system. My talk will attempt to explain this factor and its relation to the Macdonald constant term conjecture and related formulae. (Received August 03, 2016)