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Raul Gomez, Dmitry Gourevitch and Siddhartha Sahi*

(sahi@scarletmail.rutgers.edu). *Generalized and degenerate Whittaker models.*

Let G be a reductive group over a local field of characteristic 0. A *Whittaker pair* is an ordered pair $(h, e) \in \mathfrak{g} \times \mathfrak{g}$ such that $ad(h)$ is rational semi-simple and $[h, e] = 2e$. Following Mœglin-Waldspurger we attach to (h, e) a certain smooth representation of G , called the *degenerate Whittaker model*. If h is a neutral element for e , then the model depends only on the orbit of e and we refer to it as a *generalized Whittaker model*.

Our main result is the construction of an epimorphism from the generalized Whittaker model to any degenerate Whittaker model corresponding to the same orbit, as well as to certain degenerate Whittaker models corresponding to bigger orbits. We also give choice-free definitions of generalized and degenerate Whittaker models. Finally, we explain how our methods imply analogous results for Whittaker-Fourier coefficients of automorphic representations. (Received September 12, 2015)