1176-43-207 **Gestur Olafsson*** (olafsson@math.lsu.edu), Department of Mathematics, Louisiana State University, Lockett Hall 322, Baton Rouge, LA 70803, and **Jan Frahm** and **Bent Orsted**.

Whittaker vectors and holomorphic representations.

We give a quite explicit construction of Whittaker vectors in the case where N is the unipotent radical of the minimal Siegel parabolic subgroup $P = MAN$ with N abelian, and ψ is a non-degenerate unitary character on N. We also construct an embedding of the holomorphic discrete series into $L^2(G/N, \psi)$ in the case where G/K is a tube domain and determine the multiplicity of those representations in $L^2(G/N, \psi)$. Finally we realize the contribution of the holomorphic discrete series as a Hardy space of holomorphic functions on a G-invariant complex domain in $G_{\mathbb{C}}/N_{\mathbb{C}}$ cotaining G/N as in the boundary. (Received January 23, 2022)