ZHENG LIU, University of California, Santa Barbara

The doubling archimedean zeta integrals for unitary groups

In order to construct p-adic L-functions for symplectic and unitary groups by using the doubling method and verify the interpolation properties predicted by the conjecture of Coates–Perrin-Riou, special archimedean test sections need to be chosen and a doubling archimedean zeta integral needs to be calculated for holomorphic discrete series. When the holomorphic discrete series is of scalar weight, it has been done by Bocherer-Schmidt and Shimura. In this talk, I will discuss computing the archimedean zeta integrals for unitary groups when the holomorphic discrete series is of general weight. This is a joint work with Ellen Eischen.