A-packets for quasisplit $GSp(2n)$ and $GSO(2n)$ over a $p$-adic field

Abstract:

Arthur (1989) conjectured that the discrete spectrum of automorphic representations of a connected reductive group over a number field can be decomposed into global A-packets, in terms of which he also conjectured a multiplicity formula. Arthur (2013) proved his conjectures for symplectic and orthogonal groups, in which case the global A-packets are parametrized by self-dual automorphic representations of general linear groups. In this talk, I will give a construction of the local A-packets for general symplectic and general even orthogonal groups in the nonarchimedean case. This is based on our earlier works in the tempered case, and it follows a construction by Moeglin for symplectic and orthogonal groups.