Spectral factors in endoscopic transfer Diana Shelstad, Rutgers-Newark

This talk is based on some results for real groups used in Arthur's classification of global packets for classical groups. The setting is twisted endoscopy for a connected reductive algebraic group over the reals. There is a geometric transfer which generates useful test functions on the real points of an endoscopic group. I will discuss some of this, mainly to look at structure of the weights, or transfer factors, attached to pairs of conjugacy classes. Then I will introduce a parallel definition of factors based on representations instead of conjugacy classes. As in the geometric case the factors simplify when a Whittaker normalization is available. Results so far indicate that these spectral factors provide exactly the refined form of dual transfer needed globally.