1023-22-612 Dan Barbasch (barbasch@math.cornell.edu) and Alessandra Pantano* (pantano@math.cornell.edu). Methods for studying complementary series of split groups. Preliminary report.

The unitarity of a complementary series representation depends on the positivity of an intertwining operator. I will describe a method for comparing intertwining operators for different split groups. Using this method one can relate complementary series representations for (large) non-linear groups to those of (smaller) linear groups. In this talk, I will focus on one particular non-linear group, the double cover of the real split F4, and its non-spherical complementary series. (Received September 19, 2006)