Meeting: 1004, Bowling Green, Kentucky, SS 6A, Special Session on Representation Theory

## 1004-22-78 Hongyu He\* (hhe@gsu.edu), Atlanta, GA 30303. Invariant Tensor Product and Parabolic Induction.

I will introduce the concepts of algebraic invariant tensor product and analytic invariant tensor product. I will then show that the parabolic induced representation can be expressed as the invariant tensor product with a very special kind of representations. These special kind of representations plays a similar role as "Fundamental representations" in the theory of finite dimensional representations. Our proof is based on geometric analysis on certain homogeneous spaces. (Received January 17, 2005)