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**Melissa Emory\*** (`memory@math.toronto.edu`) and **Shuichiro Takeda**. *A multiplicity one theorem for general spin groups.*

A classical problem in representation theory is how a representation of a group decomposes when restricted to a subgroup. In the 1990s, Gross-Prasad formulated a conjecture regarding the restriction of representations, also known as branching laws, of special orthogonal groups. Gan, Gross and Prasad extended this conjecture, now known as the local Gan-Gross-Prasad (GGP) conjecture, to the remaining classical groups.

There are many ingredients needed to prove a local GGP conjecture. In this talk, we will focus on the first ingredient: a multiplicity at most one theorem. Aizenbud, Gourevitch, Rallis and Schiffmann proved a multiplicity at most one theorem for restrictions of irreducible representations of certain p-adic classical groups and Waldspurger proved the same theorem for the special orthogonal groups. We will discuss work that establishes a multiplicity at most one theorem for restrictions of irreducible representations for a non-classical group, the general spin group. This is joint work with Shuichiro Takeda. (Received January 20, 2021)