Melissa Emory* (mlenq2@mail.missouri.edu). Generalizing the Gan-Gross-Prasad Conjecture to a Similitude Group.

In the 1990s, Benedict Gross and Dipendra Prasad formulated an intriguing conjecture connected with restriction laws for automorphic representations of a particular group. More recently, Gan, Gross, and Prasad extended this conjecture, now known as the *Gan-Gross-Prasad Conjecture*, to the remaining classical groups. Roughly speaking, they conjectured the non-vanishing of a certain period integral is equivalent to the non-vanishing of the central value of a certain $L$-function. Ichino and Ikeda refined the conjecture to give an explicit relationship between this central value of a $L$-function and the period integral. We propose a similar conjecture for a non-classical group, the general spin group, and prove the first two cases. (Received September 26, 2017)