

## Mathematics Colloquium

## Recent progress on the Gan-Gross-Prasad conjectures

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## Abstract

The global Gan-Gross-Prasad conjectures relate the non-vanishing of central values of certain automorphic L-functions to the non-vanishing of certain explicit integrals of automorphic forms that are called 'automorphic periods'. They have been subsequently refined by Ichino-Ikeda and N.Harris into precise conjectural identities relating these two kind of invariants. These predictions also have local counterparts which concern certain branching laws in the representation theory of real or p-adic groups. This talk aims to give an introduction to this circle of conjectures and to review some recent results on the subject. If time permits, I will also describe the general stucture of (some of) the proofs.

Wednesday, 28 February 2018, 4pm Smith Hall 204

Tea and refreshments will be served at 3:45pm.