## 國 立 清 華 大 學 數 學 系 學 術 演 講 NTHU MATH Colloquium

- 講題 An introduction to the Gan-Gross-Prasad conjecture
- 講者 鄭堯教授(淡江數學系)
- 時間 2022.06.06 (Mon.) 16:00 17:00
- 地點 https://nthu-meeting.webex.com/join/hyliao

## 茶會 因遠距暫停茶會

## Abstract

The Gan-Gross-Prasad conjecture was first formulated by B. Gross and D. Prasad in 90s in the context of special orthogonal groups. Together with W. T. Gan, the conjecture was extended to all classical groups, i.e. orthogonal, unitary, symplectic and metaplectic groups. Since then, substantial progress has been made in this conjecture and it is still an active research topic in nowadays number theory and representation theory. Roughly, this conjecture consists of three parts: (i) the local conjecture; (ii) the global conjecture and (iii) the arithmetic conjecture. The local conjecture concerns a restriction or branching problem in the representation theory of real or p-adic group. The global conjecture concerns the relation between period integrals of automorphic forms and the central values of automorphic L-functions. The arithmetic conjecture concerns the relation between the first derivative of the automorphic L -functions at the central values and certain arithmetic objects. The aim of this talk is to give a brief introduction to this conjecture, focusing on the local and global conjecture.