## **NTU Math Seminar**

- 武講者: Kei-Yuen Chan (University of Georgia)
- 講 題: Homological branching law for p-adic groups
- 時間: 2019年2月15日 (星期五) 11:00 12:00 a.m.
- 地 點:臺灣大學天數館 440 室

 $\overline{\mathfrak{m}}$   $\overline{\mathfrak{P}}$ : The basic problem in representation theory is to classify irreducible representations of certain algebras or groups. The local Langlands conjecture gives an arithmetic classification of irreducible smooth representations of p-adic groups, which is the center of many research in representation theory, number theory and other areas over few decades. This conjecture has been established for several classical groups, and now one may ask other aspects of representation theory.

Branching law is a classical problem to study the structure of a representation of a group when restricted to a subgroup. The local Gan-Gross-Prasad conjecture predicts the quotient of certain restricted representations of p-adic groups. The conjecture has been completely settled. Now a new direction in branching law, suggested by Dipendra Prasad, is to study the homological behavior under restriction.

In this talk, I shall discuss some problems in homological branching law and some of recent results towards those problems. I shall also explain how Hecke algebras can be used as a new tool in studying branching problems. The results are partly joint with Gordan Savin.

會: 13:30-14:00 (天數館 519 室)

相關事宜請與顏湘伶小姐聯絡 Tel:(02)3366-2822 歡迎上網查詢 網址: http://www.math.ntu.edu.tw