

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

Number Theory Seminar

Existence of Fixed vector under Principal Congruence Subgroups of $GL(n)$

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Date: April 16, 2024 (Tuesday)

Time: 4:00 – 5:00pm

Venue: Room 210, Run Run Shaw Bldg., HKU

Abstract

Let G be an inner form of a general linear group over a non-archimedean local field. The goal of this talk is to give a necessary and sufficient condition for the existence of a non-trivial fixed vector of an irreducible smooth representation of G under principal congruence subgroups in terms of the “conductor” and Moy-Prasad “depth” of the representation. Further, we explicitly compute the dimension of the fixed vectors of a principal series representation under the congruence subgroup.

All are welcome