



# ALGEBRA SEMINAR

## Minimal positive depth representations for $p$ -adic groups of rank one

By

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**Abstract:** Gross, Reeder, and Yu have studied a class of supercuspidal representations of  $p$ -adic groups which they call epipelagic — those slightly deeper than the surface (depth zero). In this talk, we will systematically study the epipelagic representations of minimal positive depth for  $p$ -adic groups of semisimple rank one. These are the groups for which the Bruhat-Tits building is a tree. For such groups, we provide a simplified proof that all minimal positive depth supercuspidals arise via compact induction, and we will explicitly describe the orbits that provide such induction data.

**Date:** Monday, April 3, 2023

**Time:** 15:30

**Place:** SA141 - Mathematics Seminar Room