

# Séminaire de théorie des nombres

Le 19 janvier 2026 à 14h (Jussieu)

## On some new cases of the Breuil–Mézard conjecture

Exposé de Dat Pham  
(IMJ-PRG)

**Résumé :** The Breuil–Mézard conjecture is a numerical shadow of the hypothetical  $p$ -adic Langlands correspondence, which roughly describes the mod  $p$  geometry of spaces of local Galois representations with  $p$ -adic Hodge theoretic conditions in terms of modular representation theory of finite groups. In this talk, I will recall the geometric formulation of the conjecture, and explain the proof of some new cases for small Hodge–Tate weights. This is joint work in progress with Shun Yin.