Séminaire de théorie des nombres

Le 04 mars 2024 à 14h (PRG)

On mod p and p-adic representations of quaternion algebra over \mathbb{Q}_p

Exposé de Haoran Wang (Capital Normal University)

Résumé : Let D be the non-split quaternion algebra over \mathbb{Q}_p . The classical Jacquet-Langlands correspondence relates irreducible complex representations of D^{\times} with discrete series representations of $GL_2(\mathbb{Q}_p)$. About 10 years ago, using Lubin-Tate space, Scholze defined some interesting functors which gave a candidate for mod p (and p-adic) Jacquet-Langlands correspondence, even for GL_n . We will talk about some results on Scholze functors in the case of $GL_2(\mathbb{Q}_p)$. The talk is based on joint works with Yongquan Hu.