Séminaire de géométrie algébrique de Rennes¹

Exposé du mardi 07 mai 2013 (Salle 006)

SHIMURA CURVES AND MOD p LANGLANDS CORRESPONDENCE FOR GL₂.

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Résumé : Serre's conjecture states that any irreducible, continuous, and odd Galois representation $\bar{\rho} : G_{\mathbb{Q}} \to \operatorname{GL}_2(\bar{\mathbb{F}}_p)$ is modular, i.e., there exists a modular form f such that $\bar{\rho}$ is isomorphic to the Galois representation attached to f. The conjecture also predicts the possible level and weight of such forms. As Serre remarked himself, his conjecture can be viewed as part of *a mod p Langlands philosophy*. We will explain Emerton's interpretation on this topic and discuss a possible generalization to totally real fields.

^{1.} Les jeudis matin, de 10 h 30 à 11 h 30, Salle 006, IRMAR (bâtiment 22), Université de Rennes 1, Campus de Beaulieu