

- 14h-14h45 : BENJAMIN SCHRAEN

Invariants L pour $\mathrm{GL}_3(\mathbb{Q}_p)$ et cohomologie de l'espace de Drinfeld de dimension 2

La filtration de Hodge d'une représentation galoisienne locale V semi-stable de dimension 3 dépend de trois paramètres L , L' et L'' . Nous associons à une telle représentation un complexe de représentations localement analytiques de $\mathrm{GL}_3(\mathbb{Q}_p)$, ce complexe permet alors de retrouver le (φ, N) -module filtré de V dans la cohomologie de l'espace de Drinfel'd de dimension 2.

- 14h45-15h30 : FLORIAN HERZIG

Weight cycling and Serre-type conjectures

Suppose that ρ is a three-dimensional mod p Galois representation whose restriction to the decomposition group at p is irreducible and generic, and suppose that ρ is modular in some Serre weight. Then it also has to be modular in certain other Serre weights (we can give a short list of possibilities). This goes back to an observation of Buzzard for GL_2 . Under the assumption that ρ can only be modular in Serre weights which are predicted by the Serre-type conjecture discussed in my talk on Wednesday, it follows that it is modular in all nine predicted Serre weights. This is joint work with Matthew Emerton and Toby Gee.

- 16h-16h45 : VYTAUTAS PASKUNAS

Admissible unitary completions of locally \mathbb{Q}_p -rational representations

Let F be a finite extension of \mathbb{Q}_p , $p > 2$ and L a "large" finite extension of F . We construct admissible unitary completions of representations $\pi \otimes W$ of $G := \mathrm{GL}_2(F)$ on L -vector spaces, where π is a smooth absolutely irreducible representation of G and $W = \otimes_{\sigma} (\mathrm{Sym}^{r_{\sigma}} L \otimes \det^{a_{\sigma}})^{\sigma}$, where the tensor product is taken over all \mathbb{Q}_p -linear embeddings $\sigma: F \hookrightarrow L$, and G acts on the σ -tensor component via $\sigma: G \rightarrow \mathrm{GL}_2(L)$. When $F = \mathbb{Q}_p$ using the results of Berger, Breuil and Colmez on the p -adic Langlands correspondence for G , we obtain some results about lifting 2-dimensional mod p representations of the absolute Galois group of \mathbb{Q}_p to crystabelline representations with given Hodge-Tate weights.

- 16h45-17h30 : CHRISTOPHE BREUIL

Sur la compatibilité local-global pour GL_2 modulo p

On examine la question de savoir si certaines des représentations de $\mathrm{GL}_2(F)$ construites dans le cours avec Paskunas peuvent apparaître naturellement sur des espaces de cohomologie mod p . On donne des arguments en faveur du "oui", notamment en réinterprétant et généralisant des résultats de T. Gee sur les poids de Diamond.

Conférences du samedi après-midi
Saturday afternoon's conferences

- 14h-14h45 : GAËTAN CHENEVIER
The infinite fern of Galois representations of type $U(3)$
- 14h45-15h30 : MATTHEW EMERTON
On Colmez's functor for representations of $GL_2(\mathbb{Q}_p)$
- 16h-16h45 : MARIE-FRANCE VIGNÉRAS
On a generalisation of Colmez's functor to representations of $GL_n(\mathbb{Q}_p)$
- 16h45-17h30 : À venir