Séminaire de théorie des nombres

Le 6 Juin 2011 à 15h (à Jussieu)

A functor from (φ, Γ) -modules to $\mathrm{GL}_d(\mathbb{Q}_p)$ -equivariant sheaves on flag varieties

Exposé de Gergely Zabradi (Eötvös Loránd University)

Résumé: Let D be an étale (φ, Γ) -module over Fontaine's ring. We construct a $\mathrm{GL}_d(\mathbb{Q}_p)$ -equivariant sheaf associated to D on a variety of complete flags in a d-dimensional \mathbb{Q}_p -vector space. This is intended as the analogue of Colmez $P1 \boxtimes D$ for $\mathrm{GL}_d(\mathbb{Q}_p)$ and will hopefully have applications in the p-adic and mod p Langlands programme. It is still an open question under what assumptions does this sheaf have a compact $\mathrm{GL}_d(\mathbb{Q}_p)$ -subrepresentation whose dual could correspond to D via the conjectural Langlands correspondence. This is joint work in progress with Marie-France Vigneras and Peter Schneider.