Abelian varieties & Galois actions

July 25 - 27, 2017

Collegium Minus Adam Mickiewicz University Poznań, Poland

ABSTRACTS

Speaker : Chun Yin Hui

Title : The abelian part of a compatible system

Abstract : Let K be a number field and $\{V_{\ell}\}$ a strictly compatible system of semisimple Galois representations of K arising from geometry. Denote by V_{ℓ}^{ab} and G_{ℓ} respectively the maximal abelian subrepresentation and algebraic monodromy group of V_{ℓ} . We give conditions on G_{ℓ} such that the abelian subsystem $\{V_{\ell}^{ab}\}$ is also strictly compatible, which is conjectured to hold.