

# *Abelian varieties & Galois actions*

July 25 - 27, 2017

*Collegium Minus*  
*Adam Mickiewicz University*  
*Poznań, Poland*

## **ABSTRACTS**

**Speaker :** Stefan Patrikis

**Title :** *Compatible families of Galois representations with  $E_6$  monodromy*

**Abstract :** I will explain the construction of the first compatible families of Galois representations having algebraic monodromy group equal to the exceptional group  $E_6$ . The technique combines deformations of Galois representations with potential automorphy theorems. The resulting compatible systems moreover appear in the cohomology of (Shimura) varieties. (This is joint work with G. Boxer, F. Calegari, M. Emerton, B. Levin, and K. Madapusi Pera.)