

Théorie des déformations, cohomologie complétée, conjecture de Leopoldt et K-théorie
Deformation theory, completed cohomology, Leopoldt conjecture and K-theory

Luminy (CIRM), 5-9 / 12 /2016

The colloquium is supported by the Clay Math. Institute, the Department of Mathematics of Université Paris-Sud-11 and the Institut Universitaire de France

Program

Monday 5

Morning : **Benjamin Schraen**, Introduction to completed cohomology (2 hrs)

Afternoon :

Vincent Pilloni, Torsion in the cohomology of locally symmetric spaces (d'après Scholze) (2 hrs)

James Newton, Deformation theory of Galois representations (1 hr)

Tuesday 6

Morning : **Soren Galatius**, Algebraic K-theory (2 hrs)

Afternoon : **James Newton**, Deformation theory of Galois representations (1 hr)

Frank Calegari, Completed K-theory (2 hrs)

Wednesday 7

Morning : **Jack Thorne**, Modularity of non-polarizable representations (d'après Calegari-Geraghty) (3hrs)

Afternoon : free (calanques).

Thursday 8

Morning : **Patrick B. Allen**, Khare and Thorne's big ordinary $R=T$ theorem (2hrs)

Afternoon : **Frank Calegari**, Completed K-theory (1hr)

Soren Galatius, Simplicial deformation rings (1hr)

Galatius-Venkatesh, TBA (1hr).

Friday 9

Morning : **Patrick B. Allen**, Hida's conjecture and the Leopoldt conjecture (1hr)

Ana Caraiani, On the generic part of the cohomology of certain unitary Shimura varieties (1hr)

Afternoon :

Galatius-Venkatesh, TBA (1 hr).