

## Workshop Calabi-Yau Motives

28.-30.01.2019

### Speakers:

#### **Pierre Lairez (ICTP Trieste)**

*Numerical periods in effective algebraic geometry*

(Joint work with Emre Sertöz)

Building upon Mezzarobba's library for numerical analytic continuation, we can now compute the periods of quartic surfaces to arbitrary precision, and consequently many algebraic invariants: Picard group, endomorphism ring, number of embedded smooth rational curve of a given degree, etc. We start compiling a database of K3 surfaces with their invariants. This talk will aim at a hands-on presentation of the tools involved and a presentation of several examples of the database.