Number Theory Days 2017

Friday June 2nd, 2017 at 17h00 (room CE 2)

Bruno Klingler (Université Paris Diderot)

Hodge theory and atypical intersections

Given a smooth family of quasiprojective complex varieties $f: X \rightarrow S$, one would like to understand the locus of points $s \in S$ whose fiber X_s admits more Hodge classes than the very general fiber. In this talk I will describe a general conjecture (and some results) concerning this locus in terms of exceptional intersections. When S is a Shimura variety and $f: X \rightarrow S$ a standard family of Abelian varieties one recovers the Zilber-Pink conjectures, in particular the Andr\'e-Oort conjecture.

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