Séminaire de théorie des nombres

Le 30 octobre 2017 à 14h (PRG)

O-minimality and unlikely intersections for Shimura varieties

Exposé de Jinbo Ren
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Résumé : Let S be a connected Shimura variety and $V \subset S$ be a subvariety. The André-Oort conjecture asserts that V contains a Zariski dense subset of CM points if and only if V is itself a Shimura variety. Roughly speaking, this conjecture gives a description of the distribution of CM points in a Shimura variety.

By using O-minimality in model theory, it is known that the André-Oort conjecture is true for Siegel modular varieties and is valid for all Shimura varieties under assuming General Riemann Hypothesis.

In my talk, I will present a generalisation of this idea in describing the distribution of higher dimensional Shimura subvarieties.

This is joint work with Christopher Daw.