ID de Contribution: **12** Type: **Non spécifié**

Kolyvagin's Conjecture and Iwasawa Theory

mercredi 11 octobre 2023 12:15 (1 heure)

Let E be a rational elliptic curve and p be an odd prime of good ordinary reduction for E. In 1991 Kolyvagin conjectured that the system of cohomology classes derived from Heegner points on the p-adic Tate module of E over an imaginary quadratic field K is non-trivial. I will talk about joint work with A. Burungale, F. Castella, and C.Skinner, where we prove Kolyvagin's conjecture in the cases where an anticyclotomic Iwasawa Main Conjecture for E/K is known. Moreover, our methods also yield proof of a refinement of Kolyvagin's conjecture expressing the divisibility index of the Heegner point Kolyvagin system in terms of the Tamagawa numbers of E. One of the proof's key ingredients, which I will focus on during the talk, is a refinement of the Kolyvagin system argument for (anti-cyclotomic) twists of E studied by Jan Nekovář.

Orateur: Prof. GROSSI, Giada (CNRS, University Sorbonne Paris Nord)