Séminaire de théorie des nombres

Le 11 décembre 2017 à 14h (PRG)

The $\mathbb{A}_{\mathrm{inf}}$-cohomology in the semistable case

Exposé de Kestutis Cesnavicius
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Résumé : For a p-adic field K, I will explain how to extend the results of Bhatt–Morrow–Scholze on the construction and the analysis of an $\mathbb{A}_{\mathrm{inf}}$-valued cohomology theory to the case of p-adic formal, proper $\mathcal{O}_{\overline{K}}$-schemes that are semistable. The resulting cohomology theory integrally relates the p-adic etale, logarithmic crystalline, and logarithmic de Rham cohomologies. I will show how to use it to reprove the semistable conjecture of Fontaine–Jannsen and to study canonical lattices in de Rham cohomology. This talk is based on joint work with Teruhisa Koshikawa.