Séminaire de théorie des nombres

Le 17 février 2020 à 14h (PRG)

Differentiability of the arithmetic volume function along the base conditions

Exposé de Hideaki Ikoma (Shitennoji University)

Résumé : The arithmetic volume of a pair of an adelic R-Cartier divisor and an R-Cartier divisor is an invariant measuring the asymptotic behavior of the numbers of the strictly small sections of the high multiples of the pair. In this talk, we establish that the arithmetic volume function defined on an open cone of the space of pairs is Gâteaux differentiable along the directions defined by R-Cartier divisors and that the derivatives are given by arithmetic restricted positive intersection numbers.