Séminaire de théorie des nombres

Le 2 mai à 14h

The double shuffle relation for p-adic multiple zeta values

Exposé d'Amnon Besser

Résumé : Multiple zeta values are natural generalizations of the values of the zeta function at positive integers. A lot of work was done in recent years on relations between these values. The double shuffle relations is a linear relation obtained from two product formulas : the series shuffle formula, which follows from an easy series manipulation, and the integral shuffle formula, which is somewhat more involved.

Recently, Furusho defined p-adic multiple zeta values using Coleman integration. In his theory the integral shuffle formula follows but the easier series formula was missing.

The talk will describe the proof of the series shuffle formula given in my joint work with Furusho. The new ingredients are the use of Coleman integration in several variables and the use of Deligne's tangential basepoint.