

**February 29:** Benjamin Enriquez (Strasbourg), “Drinfeld associators, braid groups and the Kashiwara-Vergne conjecture.”

The talk will be a review of the following works. The KV conjecture states the existence of a pair of Lie series satisfying equations related with the CBH series. It was formulated by Kashiwara and Vergne, who showed that such an object gives rise to a uniform proof of the Duflo algebra isomorphism between the center of a universal enveloping algebra and the Poisson center of its associated graded algebra. This conjecture was first proved by Alekseev and Meinrenken using deformation quantization. Later, Alekseev and Torossian proposed an approach based on a non-commutative analogue of the Jacobian of a diffeomorphism, reduced the problem to that of finding automorphisms of completed free algebras satisfying a pentagon-type equation, and found inductive solutions of the algebraic part of the KV problem. Using the relation between the free and braid groups, and between braid groups and associators, these authors and the speaker managed to find a complete proof of the KV conjecture, alternative to that of Alekseev and Meinrenken. (Based on joint work with A. Alekseev and C. Torossian.)