

Algèbres non commutatives, théorie des représentations et fonctions
spéciales
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Non-commutative algebras, representation theory and special functions
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Elliptic Algebras

This will be an introductory talk. Elliptic algebras are, as the name suggests, a family of non-commutative algebras that are defined in terms of an elliptic curve E and a translation automorphism ξ of it. For each pair of co-prime integers $n > k > 0$ there is a family $Q_{n,k}(E, \xi)$ of deformations of the polynomial ring on n variables. When $k=1$ these are called Sklyanin algebras, and although quite a lot is known about them, especially when $n=3,4$, their representation theory is not understood. When $k > 1$ much less is known. I will discuss some work with Chirvasitu and Kanda.