Quantum Periods for Complements

vendredi 14 juin 2024 15:30 (1 heure)

A polynomial P in two variables defines a one-parameter family of spectral curves which are level sets of P, and the corresponding variation of Hodge structures on 1st cohomology groups of these curves. What happens if one quantizes the algebra of polynomials, i.e. deforms it to the Weyl algebra? I'll explain an approach based on second cohomology of complements to the level sets. In particular, one obtains a cohomological description of WKB series for Bohr-Sommerfeld quantization rules. This is joint work with A.Soibelman.

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