ID de Contribution: **11** Type: **Non spécifié**

Stability Structures in Holomorphic Morse-Novikov Theory

I will talk about an elementary example illustrating the general program (by Y.Soibelman and myself) relating Floer theory for complex symplectic manifolds, quantization and resurgence. The specific question is about the space of morphisms between two specific branes in the cotangent bundle to a complex manifold. The first brane is the zero section endowed with a generic rank 1 local system, while the second brane is the graph of a closed holomorphic 1-form. In this case the whole story is reduced to Morse-Novikov theory, DT invariants count gradient lines connecting zeroes of 1-form. The graded Lie algebra in this case is the algebra of matrix-valued functions on an algebraic torus, which is simpler than the usual Lie algebra of Hamiltonian vector fields as in WKB analysis. The wall-crossing structure can be completely characterized by a quadruple of explicit rational matrix-valued functions.

Orateur: KONTSEVICH, Maxim (IHES)