

abstract

MEMBERS SEMINAR

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

I will explain the main notions of the microlocal theory of sheaves: the microsupport and its behaviour with respect to the operations, with emphasis on the Morse lemma for sheaves. Then, inspired by the recent work of Tamarkin but with really different methods and results, I will apply this theory to treat some classical problems of non-displaceability in symplectic topology (conservation of Morse inequalities, positive isotopies). The main tool is a theorem which asserts that any Hamiltonian isotopy admits a unique sheaf quantization (joint work with S. Guillermou and M. Kashiwara).

References:

M. Kashiwara and P. Schapira, Sheaves on Manifolds, Grundlehren der Math. Wiss. 292 Springer-Verlag (1990).

S. Guillermou, M. Kashiwara and P. Schapira, Sheaf quantization of Hamiltonian isotopies and applications to non displaceability problems, [math.arXiv:1005.1517](#).

D. Tamarkin, Microlocal conditions for non-displaceability, [math.arXiv:0809.1584](#).