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*Title: Persistence modules in symplectic topology*

Abstract:

There is a long history of establishing quantitative rigidity phenomena in symplectic topology by studying properties of action filtrations on Floer complexes. Recently it has begun to be appreciated that the language of persistence modules allows one to understand such old results more systematically and also to establish new ones. After introducing basic definitions and results related to persistence modules, I will discuss several examples of their use in proving results about Hofer's geometry on the Hamiltonian diffeomorphism group and about non-isotopic symplectic embeddings.