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Limited interaction phenomena in Floer theory of disjointly supported Hamiltonians

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Filtered Floer homology is a central tool in the study of Hamoltonian dynamics on symplectic manifolds. In a local-to-global theme, one may ask "*How does the filtered Floer homologies of disjointly supported Hamiltonians relate to that of their sum?*". There are several works studying this interaction between disjointly supported Hamoltonians and their sum, mostly through associated quantitative invariants. These works indicate that there is a limited Floer-theoretic interaction between such Hamiltonians.

We study this Floer-theoretic interaction directly on the level of Floer trajectories on closed aspherical manifolds, and find restrictions from which we derive several applications. In particular, we prove that the spectral invariants of the fundamental and the point classes are indifferent to the topology outside the Hamiltonian's support in certain situations. This is a joint work in progress with Shira Tanny.