

Symmetric Capacity and Local Systems on the Path Space

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In this talk, we will discuss the symmetric Hofer-Zehnder capacity, which can be defined when we have a symplectic manifold X equipped with an anti-symplectic involution φ . Similarly to the standard Hofer-Zehnder capacity, it is desirable to know conditions for which this capacity is finite, and we will see that for certain cases, we can employ suitable local systems on the path space $\Omega(X, L)$ of paths connecting a Lagrangian L to itself to do so, as inspired by Albers, Frauenfelder and Oancea's paper *Local systems on the free loop space and finiteness of the Hofer-Zehnder capacity*.