Abstract:

For any Lie group $G$, we construct a $G$-equivariant analogue of symplectic capacities and give examples when $G = \mathbb{T}^k \times \mathbb{R}^{d-k}$, in which case the capacity is an invariant of integrable systems. Then we study the continuity of these capacities, using the natural topologies on the symplectic $G$-categories on which they are defined.

This work is joint with Alvaro Pelayo and Alessio Figalli.