CALABI QUASI-MORPHISM ON SURFACES

PIERRE PY

If (V, ω) is a closed connected symplectic manifold, the group

$\operatorname{Ham}(V,\omega)$

of Hamiltonian diffeomorphisms of V is a simple group, according to a theorem of A. Banyaga. Hence it does not admit any homomorphism to \mathbb{R} . In this talk I will discuss the existence of *quasi-morphisms* defined on this group. Following a question of M. Entov and L. Polterovich, I will focus on quasi-morphisms related to the so-called *Calabi invariant*.