On the space of non-descending quasi-morphisms

Speaker: Morimichi Kawasaki

Abstract: For a topological group G, a quasi-morphism on the universal covering of G is said to descend if it comes from a quasi-morphism on G. In this talk, we study the space of non-descending quasi-morphisms. As its application, we prove (un)boundedness of some characteristic classes on the group of (contact) Hamiltonian diffeomorphisms. This is a joint work with Shuhei Maruyama.

If time permits, we also explain our recent study on the space of non-extendable quasimorhisms, which is a joint work with Mitsuaki Kimura, Takahiro Matsushita, Shuhei Maruyama and Masato Mimura.