

## **Non-contractible periodic orbits in Hamiltonian dynamics on closed symplectic manifolds**

Viktor Ginzburg (Santa Cruz)

### **Abstract:**

In this talk, we will discuss Hamiltonian diffeomorphisms of closed symplectic manifolds with non-contractible periodic orbits. In a variety of settings, we will show that the presence of one non-contractible periodic orbit of a Hamiltonian diffeomorphism of a closed symplectic manifold implies the existence of infinitely many non-contractible periodic orbits in a specific collection of free homotopy classes. The talk is based on a joint work with Basak Gurel.