



FMSP Lectures

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Arnold conjecture, Floer homology, and
augmentation ideals of finite groups.

March 10 (Tuesday) 16:30 ~ 18:00 Room 056

Tea: 16:00-16:30 Common Room

Abstract:

Let H be a generic time-dependent 1-periodic Hamiltonian on a closed weakly monotone symplectic manifold M . We construct a refined version of the Floer chain complex associated to (M, H) , and use it to obtain new lower bounds for the number $P(H)$ of the 1-periodic orbits of the corresponding hamiltonian vector field. We prove in particular that if the fundamental group of M is finite and solvable or simple, then $P(H)$ is not less than the minimal number of generators of the fundamental group.

This is joint work with Kaoru Ono.