

Abstract: We prove that an elliptic equilibrium point with Diophantine frequencies for an analytic Hamiltonian system is always accumulated by invariant Lagrangian tori. Generically the set of such tori has positive measure, but if this is always the case is still an open question (raised by Herman in his ICM lecture 1996). This is a joint work with B. Fayad and R. Krikorian.