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Kaoru Ono* (ono@kurims.kyoto-u.ac.jp), Research Institute for Mathematical Sciences,
Kyoto University, Kyoto, Kyoto 606-8502, Japan, and **Hong Van Le** (hvle@math.caz.cz),
Institute of Mathematics, Czech Academy of Sciences, Zitna 25, 11567 Prague, Czech Rep.
Floer-Novikov cohomology, revisited. Preliminary report.

We studied Floer (co)homology for locally Hamiltonian systems. The construction is a straightforward generalization of the case of Hamiltonian systems. However, computation is not the case. In the early 1990's, we computed it in terms of Novikov (co)homology of the flux in the case of positive/negative monotone symplectic manifolds. In the middle of the 2000's, I gave a lower bound of its rank (over Novikov ring) by “minimal Novikov numbers”. This is based on a construction of Floer complex over a ring, which is smaller than usually used Novikov ring. In this talk, we present an estimate by replacing minimal Novikov numbers by Novikov numbers of the flux as a consequence of computation of a variant of Floer (co)homology for a locally Hamiltonian system in terms of Novikov (co)homology of the flux. (Received January 28, 2019)