## EXTENSION THEORY APPROACH IN STABILITY OF STANDING WAVES FOR NLS EQUATION WITH POINT INTERACTIONS

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ABSTRACT. The aim of this talk is to demonstrate effectiveness of extension theory for investigation of stability of standing waves for semi-linear Schrödinger equation with  $\delta$ - and  $\delta'$ -interaction. Our approach relies on the abstract theory by Grillakis, Shatah and Strauss for Hamiltonian systems which are invariant under a one-parameter group of operators. This is joint work with Nataly Goloshchapova/Department of Mathematics, IME-USP.