

SEMINAIRE D'ANALYSE

➤ **FRIDAY 11 DECEMBER, 2015 AT 16:30 - ROOM MA A3 31**

Professor Thomas **KAPPELER** (Universität Zürich, CH) will give a seminar, on

«Large KAM tori for arbitrary semi-linear perturbations of the defocusing NLS equation»

Abstract: We prove that small, semi-linear perturbations of the defocusing NLS equation on the circle have an abundance of invariant tori of arbitrary finite dimension and arbitrary size which support quasi-periodic solutions. The perturbations are assumed to be of finite regularity, but otherwise arbitrary. In particular they might depend on the space variable. The proof is based on a Newton-Nash-Moser iteration scheme to construct the invariant tori for the perturbed equation and uses that the defocusing NLS equation admits global Birkhoff coordinates.

This is joint work with Massimiliano and Riccardo Montalto.

Lausanne, November 26, 2015

JK/rb