

Name: Silvius Klein

Affiliation: Department of Mathematics, Norwegian University of Science and Technology (NTNU)

[joint work with Pedro Duarte]

Title: Continuity of the Lyapunov exponents for analytic, quasi-periodic, linear co-cycles

Abstract: Consider the Banach manifold of analytic linear co-cycles with values in the general linear group of any dimension and base dynamics given by a Diophantine translation on the circle or on a higher dimensional torus. We prove quantitative continuity results for the Lyapunov exponents as functions of the co-cycle. The method of proof consists of an analytic tool - a large deviation estimate for the iterates of the co-cycle and of a criterion for establishing the growth of long products of matrices, called the avalanche principle.