

abstract

Symplectic Dynamics Seminar
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

This is a series of 3 talks on the topology of Stein manifolds, based on work of Eliashberg since the early 1990ies. More specifically, I wish to explain to what extent Stein structures are flexible, i.e. obey an h-principle. After providing some general background on Stein manifolds, the first talk will focus on the construction of plurisubharmonic functions with specific properties. Using these, I will in the second talk present the proof of Eliashberg's existence theorem for Stein structures.

The third talk concerns several flexibility results: an h-cobordism theorem for Stein structures, realization of pseudo-isotopies by Stein structures, and a new class of "flexible Stein structures" that obey a 1-parametric h-principle.