

GRADUATE STUDENT SEMINAR



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A Primer on Pseudoholomorphic Curves

Monday, October 6, 2014

4:00PM in 129 Hayes-Healy Hall

ABSTRACT:

I will begin with an overview of almost complex manifolds and complex manifolds. Next, I will define pseudoholomorphic curves (or (J-)holomorphic curves) and I will try to convince you that these are just the usual notion of a holomorphic function in a special case. After that, I will give some basic definitions in symplectic geometry and relations with almost complex structures. Finally, I will state some results in symplectic geometry which are applications of holomorphic curves, one of which can be thought of as a generalization of the Riemann Mapping Theorem. analogue of the well-known