

Department of Mathematics
University of Notre Dame

Graduate Student Seminar

Speaker: Karim Boustany
University of Notre Dame

Date: Tuesday, February 14, 2023

Time: 4:00 pm

Location: 258 Hurley Bldg

Zoom URL: notredame.zoom.us/j/93888654312



Seminar Title: Pseudoholomorphic Curves in Symplectic Topology

Abstract:

Pseudoholomorphic curve methods have been prevalent in symplectic topology ever since their introduction in Gromov's seminal paper in the eighties. In this sequel to last week's talk, I will give an introduction to the moduli space of these curves, discussing such topics as transversality, compactness, and bubbling. I will also survey the use of these moduli spaces in defining invariants of symplectic and contact manifolds. Examples include Gromov-Witten invariants as well as various flavors of homology, of which I will try to sketch at least one.