

Math 868 Seminars

This is a list of *possible* topics for seminar talks. You are encouraged to find others on your own. These topics are not listed in any special order. After the first several weeks of class you will have enough background for most of these topics.

Talks will be given 2-3 on Tuesdays and 10:10-11:00 on Thursdays in C304 (our classroom).

Partitions of unity	Chris Potvin	Thurs. Oct. 9, 2-3 pm
Quaternions and the Hopf map	Quinn Minnish	Thurs. Oct. 18, 10:20 am
Manifolds with boundary	Rob McConkey	Tues. Oct. 23, 2 pm
Representations of $SU(2)$	Stan Halstead	Tues. Oct. 30, 2 pm
The Whitney Embedding Theorem	Chris Sukhu	Tues. Nov. 6, 2 pm
Exponential map for a Lie group	Danika Vanniel	Thurs. Nov. 8, 10:10 am
Normal bundles and Tubular Nbd	Dylan Molho	Tues. Nov. 13, 2 pm
Connected Sums of Manifolds	Chris St.Clair	Thurs. Nov. 15
Introduction to Morse Theory	Tristan Wells	
Simplices and Euler's Formula	Sarah Tymochko	Tues. Nov 20.
Brouwer Fixed Point Theorem	Chloe Lewis	
Grassmann manifolds	Avik Sarkar	Tues. Nov. 27
Pullbacks and Universal bundles	Jacob Gloe	
Principal Bundles and Frame Bundles	Yishen Zhao	
Symplectic manifolds	Mohit Bansil	Thurs. Nov. 29
Laplacian on a Riemannian manifold	Zhixin Wang	
Cauchy Integral Formula via forms	Chen Zhang	
Brouwer Degree of a map	Luis Suarez	Tues. Dec. 4
Group actions, orbit spaces, and Homogeneous spaces	David Shane and Alex Hopkins	Paper
Linking Numbers	Matt Rizik	
Sard's Theorem	Shih-Fang Yeh	Paper
Proof of the Inverse Function Theorem	Zhonghui Sun	Paper