Math 225a, Introduction to Manifold Theory  
Fall 2022 

Venue: TBA  
Time: MWTh 1:25-2:15  
Instructor: Bong Lian (lian@-, Goldsmith 314, X6-3069)  
Office Hours: TTh 3:10-4:00 or by appointment

Course Description
This will be an introduction to manifold theory. The textbook will be *DIFFERENTIABLE MANIFOLDS*, by Nigel Hitchin. This is a set of course notes written by the author at Oxford. All other course material including homework assignments and announcements will be posted on my web page*

http://people.brandeis.edu/~lian/math225a-F22/225a-F22.html

For topics we plan to cover, see the table of content of Hitchin’s notes.  
* to be constructed

Learning Goals
Students in Math 225a will learn the basic language of manifolds, and apply techniques from calculus and analysis to study these geometrical objects; students are therefore assumed to be thoroughly familiar with such background techniques, which they should have learned from prior courses.

4-Credit Course
Success in this 4-credit hour course is based on the expectation that students will spend a minimum of 10-12 hours of study time per week in preparation for class (pre-lecture study, post-lecture reviews, homework, in-class discussions).

Grading
Late homework will be accepted with a 25% penalty, up to one week after the due date and before the solution has been posted. Homework submitted more than one week late or after the solution has been posted will not be accepted. Most homework problems will be drawn from the textbook. There will be no exams in this course. A student grade will be based on their homework assignments, which are expected to be roughly biweekly, and classroom participations. If time permits, students may be asked to prepare and lecture on selected topics.