

Math 545
Winter 2019
Homework 2

Read Chapters 1 and 2 of *Introduction to Smooth Manifolds*. Do Problem 1-9, Problem 2-8, and the following supplementary exercise.

Supplementary Exercise: Prove that $\mathbb{C}P^1$ (with the smooth structure of Problem 1-9) is diffeomorphic to S^2 (with the usual smooth structure). You may find (part of) Problem 1-7 useful, which you may use without proof.