Lectures on Manifold Theory

## Differentiable Manifolds

## Som Phene

somphene1@gmail.com

Differentiable Manifolds form the most basic and natural objects in advanced calculus as is seen by the natural form that Stokes Theorem takes in the manifold setup. In this talk we will give an overview of Differentiable Manifolds including basic definitions and examples of submanifolds as well as abstract manifolds with applications to Lie Groups, Riemannian Geometry, Dynamical Systems and so on.

Department of Mathematics, IIT Bombay, Mumbai, India