Chapter 1

Differential Equations

Lectured by Professor Demetrios Papageorgiou Typed by Yu Coughlin Spring 2024

0 Introduction

The following are suggested textbooks:

- G F Simmons, Calculus with Analytic Geometry, 1995
- J Stewart, Calculus, 2011
- S Lang, A First Course in Calculus, 1986
- S Lang, Undergradute Analysis, 1997
- J Marsden and A Weinstein, Calculus I and Calculus II, 1985

Lecture 1 Thursday 10/01/19

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- 1 Fourier transform
- 2 Ordinary differential equations
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- 4 Bifurcations
- 5 Multivariate calculus
- 6 Partial differential equations