

# Real Analysis in Several Variables

December 3, 2023

## Contents

<b>A Other Chapters</b> .....	<b>1</b>
-------------------------------	----------

## Appendices

### A Other Chapters

#### Set Theory

1. Sets
2. Constructions With Sets
3. Pointed Sets
4. Tensor Products of Pointed Sets
5. Indexed and Fibred Sets
6. Relations
7. Spans
8. Posets

#### Category Theory

9. Categories

10. Constructions With Categories

11. Kan Extensions

#### Bicategories

12. Bicategories
13. Internal Adjunctions

#### Internal Category Theory

14. Internal Categories

#### Cyclic Stuff

15. The Cycle Category

#### Cubical Stuff

16. The Cube Category

#### Globular Stuff

17. The Globe Category

### Cellular Stuff

18. The Cell Category

### Monoids

19. Monoids

20. Constructions With Monoids

### Monoids With Zero

21. Monoids With Zero

22. Constructions With Monoids With Zero

### Groups

23. Groups

24. Constructions With Groups

### Hyper Algebra

25. Hypermonoids

26. Hypergroups

27. Hypersemirings and Hyperrings

28. Quantales

### Near-Rings

29. Near-Semirings

30. Near-Rings

### Real Analysis

31. Real Analysis in One Variable

32. Real Analysis in Several Variables

### Measure Theory

33. Measurable Spaces

34. Measures and Integration

### Probability Theory

34. Probability Theory

### Stochastic Analysis

35. Stochastic Processes, Martingales, and Brownian Motion

36. Itô Calculus

37. Stochastic Differential Equations

### Differential Geometry

38. Topological and Smooth Manifolds

### Schemes

39. Schemes