Groups

December 3, 2023

Contents

Appendices Other Chapters Set Theory 10. Constructions With Categories 1. Sets 11. Kan Extensions **Bicategories** 2. Constructions With Sets 12. Bicategories 3. Pointed Sets 13. Internal Adjunctions 4. Tensor Products of Pointed Sets **Internal Category Theory** 5. Indexed and Fibred Sets 14. Internal Categories 6. Relations Cyclic Stuff 7. Spans 15. The Cycle Category 8. Posets **Cubical Stuff Category Theory** 16. The Cube Category 9. Categories **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 Probability Theory 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

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