# The Cube Category

December 3, 2023

# 00UE

	m Ta	ents
-		

Appendices			
A Other Chapters			
Set Theory	9. Categories		
1. Sets	10. Constructions With Categories		
2. Constructions With Sets	11. Kan Extensions		
<ol> <li>Pointed Sets</li> <li>Tensor Products of Pointed Sets</li> </ol>	Bicategories  12. Bicategories		
5. Indexed and Fibred Sets	13. Internal Adjunctions Internal Category Theory		
6. Relations	14. Internal Categories		
7. Spans	Cyclic Stuff  15. The Cycle Category		
8. Posets	Cubical Stuff		
Category Theory	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