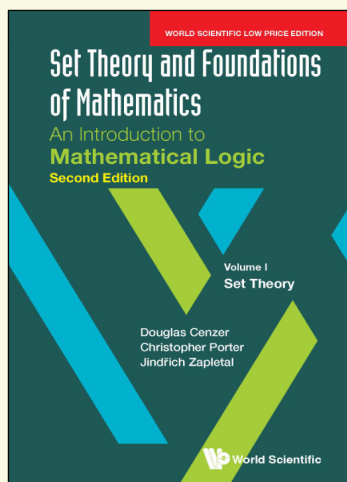


Set Theory and Foundations of Mathematics

An Introduction to Mathematical Logic

2nd Edition (Volume 1 Set Theory)



By **Douglas Cenzer**
(University of Florida, USA)
Christopher Porter
(Drake University, USA)
Jindřich Zapletal
(University of Florida, USA)

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ABOUT THE BOOK

This book presents both axiomatic and descriptive set theory, targeting upper-level undergraduate and beginning graduate students. It aims to equip them for advanced studies in set theory, mathematical logic, and other mathematical fields, including analysis, topology, and algebra.

The book is designed as a flexible and accessible text for a one-semester introductory in set theory, where the existing alternatives may be more demanding or specialized. Readers will learn the universally accepted basis of the field, with several popular topics added as an option. Pointers to more advanced study are scattered through the text.

This new edition includes additional topics on trees, ordinal functions, and sets, along with numerous new exercises. The presentation has been improved, and several typographical errors have been corrected.

READERSHIP

Upper level undergraduate or beginning graduate students interested in set theory and mathematical logic.

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- Introduction
- Review of Sets and Logic
- Zermelo–Fraenkel Set Theory
- Natural Numbers and Countable Sets
- Ordinal Numbers and the Transfinite
- Cardinality and the Axiom of Choice
- Real Numbers
- Models of Set Theory
- Ramsey Theory

ABOUT THE AUTHORS

Douglas Cenzer is Professor Emeritus at the University of Florida., where he was Department Chair from 2013 to 2018. He has to his credit more than 120 research publications, specializing in mathematical logic, in particular computability, complexity and randomness. He has supervised 13 PhD students. Cenzer is an editor for the journal *Archive for Mathematical Logic*. He joined the University of Florida in 1972 after receiving his PhD in mathematics from the University of Michigan. He has held visiting positions at the MSRI, Berkeley and at the Newton Institute, Cambridge.

Christopher Porter is Associate Professor of Mathematics and Computer Science at Drake University and the Director of Drake's Artificial Intelligence Program. His research interests also include computability theory, algorithmic randomness, and the philosophy of mathematics. Porter received his PhD from the University of Notre Dame in 2012, was an NSF International Fellow at Université Paris 7 from 2012 to 2014, and a postdoctoral associate at the University of Florida from 2014 to 2016, before joining Drake University in 2016.

Jindřich Zapletal is Professor of Mathematics at the University of Florida, specializing in mathematical logic and set theory. He received his PhD in 1995 from the Pennsylvania State University and held postdoctoral positions at MSRI Berkeley, Caltech, and Dartmouth College before joining the University of Florida in 2000.

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