

Limits of Mathematics

A Journey Through the Key Areas of Mathematical Logic

Is mathematics free of contradictions? Are there truths beyond what can be proven? Is it possible to encode our mathematical knowledge into a single number?

Modern mathematical logic of the twentieth century provides astonishing answers to these questions.

This book takes you on a journey through the core areas of mathematical logic, leading to the limits of mathematics. The covered topics include the history of mathematical logic, formal systems, axiomatic number theory and set theory, proof theory, Gödel's incompleteness theorems, computability theory, algorithmic information theory, and model theory.

The book contains numerous two-color illustrations and more than 70 exercises (with solutions available on the author's website). This translation is based on the third edition of the original German book.

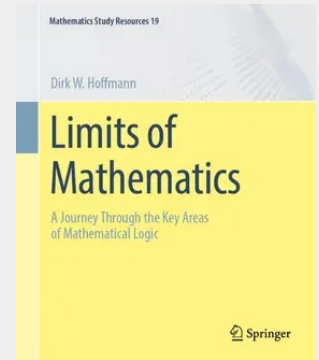
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About the author

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