



Springer

1st  
edition

2012, XI, 191 p. 42 illus.

**Printed book**

Softcover

**Printed book**

Softcover

ISBN 978-1-4471-2157-2

£ 54,99 | CHF 71,00 | 59,99 € |

65,99 € (A) | 64,19 € (D)

Available

**Discount group**

Standard (0)

**Product category**

Graduate/advanced undergraduate textbook

**Series**

Universitext

**Other renditions**

Softcover

ISBN 978-1-4471-2159-6

**Mathematics : Number Theory**

Morishita, Masanori

# Knots and Primes

**An Introduction to Arithmetic Topology**

- Starts at an elementary level and builds up to a more advanced theoretical discussion
- Written by a world expert on arithmetic topology
- A large number of illustrative examples are provided throughout

This is a foundation for arithmetic topology - a new branch of mathematics which is focused upon the analogy between knot theory and number theory. Starting with an informative introduction to its origins, namely Gauss, this text provides a background on knots, three manifolds and number fields. Common aspects of both knot theory and number theory, for instance knots in three manifolds versus primes in a number field, are compared throughout the book. These comparisons begin at an elementary level, slowly building up to advanced theories in later chapters. Definitions are carefully formulated and proofs are largely self-contained. When necessary, background information is provided and theory is accompanied with a number of useful examples and illustrations, making this a useful text for both undergraduates and graduates in the field of knot theory, number theory and geometry.

**Order online at [springer.com/book sellers](http://springer.com/book sellers)****Springer Nature Customer Service Center GmbH**

Customer Service

Tiergartenstrasse 15-17

69121 Heidelberg

Germany

T: +49 (0)6221 345-4301

[row-book sellers@springernature.com](mailto:row-book sellers@springernature.com)

ISBN 978-1-4471-2157-2 / BIC: PBH / SPRINGER NATURE: SCM25001

Prices and other details are subject to change without notice. All errors and omissions excepted. Americas: Tax will be added where applicable. Canadian residents please add PST, QST or GST. Please add \$5.00 for shipping one book and \$ 1.00 for each additional book. Outside the US and Canada add \$ 10.00 for first book, \$5.00 for each additional book. If an order cannot be fulfilled within 90 days, payment will be refunded upon request. Prices are payable in US currency or its equivalent.

Part of **SPRINGER NATURE**