Google Drive

Topology Illustrated

Peter Saveliev

Download now

Click here if your download doesn"t start automatically

Topology Illustrated

Peter Saveliev

Topology Illustrated Peter Saveliev
This book follows a two-semester first course in topology with emphasis on algebraic topology. Some of the applications are: the shape of the universe, configuration spaces, digital image analysis, data analysis, social choice, exchange economy. An overview of discrete calculus is also included. The book contains over 1000 color illustrations and over 1000 exercises. The spreadsheets for the simulations and other supplementary material are found at the author's website.

CONTENTS

- Chapter 1. Cycles
  - 1. Topology around us
  - 2. Homology classes
  - 3. Topology of graphs
  - 4. Homology groups of graphs
  - 5. Maps of graphs
  - 6. Binary calculus on graphs
- Chapter 2. Topologies
  - 1. A new look at continuity
  - 2. Neighborhoods and topologies
  - 3. Topological spaces
  - 4. Continuous functions
  - 5. Subspaces
- Chapter 3. Complexes
  - 1. The algebra of cells
  - 2. Cubical complexes
  - 3. The algebra of oriented cells
  - 4. Simplicial complexes
  - 5. Simplicial homology
  - 6. Simplicial maps
  - 7. Parametric complexes
- Chapter 4. Spaces
  - 1. Compacta
  - 2. Quotients
  - 3. Cell complexes
  - 4. Triangulations
  - 5. Manifolds
  - 6. Products
- Chapter 5. Maps
  - 1. Homotopy
  - 2. Cell maps
  - 3. Maps of polyhedra
  - 4. The Euler and Lefschetz numbers

    - 5. Set-valued maps
- Chapter 6. Forms
    - 1. Discrete forms and cochains
    - 2. Calculus on cubical complexes
    - 3. Cohomology
    - 4. Metric tensor
- Chapter 7. Flows
    - 1. Metric complexes
    - 2. ODEs
    - 3. PDEs
    - 4. Social choice

Download Topology Illustrated ...pdf

Read Online Topology Illustrated ...pdf

Download and Read Free Online Topology Illustrated Peter Saveliev

---

From reader reviews:

Joy Hanson:

The book Topology Illustrated can give more knowledge and also the precise product information about everything you want. Why must we leave the good thing like a book Topology Illustrated? Several of you have a different opinion about reserve. But one aim that will book can give many info for us. It is absolutely correct. Right now, try to closer with the book. Knowledge or info that you take for that, you could give for each other; you may share all of these. Book Topology Illustrated has simple shape however, you know: it has great and big function for you. You can appearance the enormous world by start and read a book. So it is very wonderful.

Carolyn Fletcher:

This book untitled Topology Illustrated to be one of several books which best seller in this year, that's because when you read this publication you can get a lot of benefit in it. You will easily to buy this kind of book in the book retail store or you can order it via online. The publisher on this book sells the e-book too. It makes you more readily to read this book, as you can read this book in your Touch screen phone. So there is no reason to you to past this guide from your list.

Allen Goehring:

The reserve with title Topology Illustrated has a lot of information that you can discover it. You can get a lot of advantage after read this book. This kind of book exist new expertise the information that exist in this publication represented the condition of the world at this point. That is important to yo7u to understand how the improvement of the world. That book will bring you with new era of the glowbal growth. You can read the e-book on your smart phone, so you can read the item anywhere you want.

Brian Rocha:

Don't be worry when you are afraid that this book will filled the space in your house, you can have it in e-book approach, more simple and reachable. This particular Topology Illustrated can give you a lot of buddies because by you looking at this one book you have issue that they don't and make you actually more like an interesting person. This particular book can be one of a step for you to get success. This e-book offer you information that probably your friend doesn't realize, by knowing more than different make you to be great folks. So , why hesitate? We should have Topology Illustrated.

Download and Read Online Topology Illustrated Peter Saveliev

#FWI921VTGRZ

Read Topology Illustrated by Peter Saveliev for online ebook

Topology Illustrated by Peter Saveliev Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Topology Illustrated by Peter Saveliev books to read online.

Online Topology Illustrated by Peter Saveliev ebook PDF download

Topology Illustrated by Peter Saveliev Doc

Topology Illustrated by Peter Saveliev Mobipocket

Topology Illustrated by Peter Saveliev EPub