



Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics)

By Juha Heinonen, Tero Kilpeläinen, Olli Martio, Mathematics

Download now

Read Online ➔

Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) By Juha Heinonen, Tero Kilpeläinen, Olli Martio, Mathematics

A self-contained treatment appropriate for advanced undergraduates and graduate students, this text offers a detailed development of the necessary background for its survey of the nonlinear potential theory of superharmonic functions. Starting with the theory of weighted Sobolev spaces, this treatment advances to the theory of weighted variational capacity. Succeeding chapters investigate solutions and supersolutions of equations, with emphasis on refined Sobolev spaces, variational integrals, and harmonic functions. Chapter 7 defines superharmonic functions via the comparison principle, and chapters 8 through 14 form the core of the nonlinear potential theory of superharmonic functions. Topics include balayage; Perron's method, barriers, and resolutivity; polar sets; harmonic measure; fine topology; harmonic morphisms; and quasiregular mappings. The text concludes with explorations of axiomatic nonlinear potential theory and helpful appendixes.

 [Download Nonlinear Potential Theory of Degenerate Elliptic ...pdf](#)

 [Read Online Nonlinear Potential Theory of Degenerate Elliptic ...pdf](#)

Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics)

By Juha Heinonen, Tero Kilpeläinen, Olli Martio, Mathematics

Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) By Juha Heinonen, Tero Kilpeläinen, Olli Martio, Mathematics

A self-contained treatment appropriate for advanced undergraduates and graduate students, this text offers a detailed development of the necessary background for its survey of the nonlinear potential theory of superharmonic functions.

Starting with the theory of weighted Sobolev spaces, this treatment advances to the theory of weighted variational capacity. Succeeding chapters investigate solutions and supersolutions of equations, with emphasis on refined Sobolev spaces, variational integrals, and harmonic functions. Chapter 7 defines superharmonic functions via the comparison principle, and chapters 8 through 14 form the core of the nonlinear potential theory of superharmonic functions. Topics include balayage; Perron's method, barriers, and resolutivity; polar sets; harmonic measure; fine topology; harmonic morphisms; and quasiregular mappings. The text concludes with explorations of axiomatic nonlinear potential theory and helpful appendixes.

Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) By Juha Heinonen, Tero Kilpeläinen, Olli Martio, Mathematics Bibliography

- Sales Rank: #1373609 in Books
- Published on: 2006-10-06
- Released on: 2006-10-06
- Original language: English
- Number of items: 1
- Dimensions: .81" h x 5.54" w x 8.48" l, .95 pounds
- Binding: Paperback
- 416 pages

 [Download Nonlinear Potential Theory of Degenerate Elliptic ...pdf](#)

 [Read Online Nonlinear Potential Theory of Degenerate Elliptic ...pdf](#)

Editorial Review

Users Review

From reader reviews:

Nancy Jackson:

As people who live in the particular modest era should be upgrade about what going on or facts even knowledge to make all of them keep up with the era that is always change and make progress. Some of you maybe will certainly update themselves by studying books. It is a good choice for you personally but the problems coming to a person is you don't know which you should start with. This Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) is our recommendation to cause you to keep up with the world. Why, as this book serves what you want and wish in this era.

Stephen Ross:

Now a day individuals who Living in the era where everything reachable by talk with the internet and the resources inside it can be true or not involve people to be aware of each facts they get. How a lot more to be smart in getting any information nowadays? Of course the solution is reading a book. Reading a book can help persons out of this uncertainty Information specifically this Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) book because this book offers you rich details and knowledge. Of course the info in this book hundred per-cent guarantees there is no doubt in it you know.

Jill Weber:

Spent a free time to be fun activity to do! A lot of people spent their leisure time with their family, or their own friends. Usually they performing activity like watching television, about to beach, or picnic inside the park. They actually doing same every week. Do you feel it? Do you need to something different to fill your own personal free time/ holiday? Might be reading a book can be option to fill your free time/ holiday. The first thing that you will ask may be what kinds of publication that you should read. If you want to try out look for book, may be the book untitled Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) can be good book to read. May be it might be best activity to you.

Edward Grimes:

Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) can be one of your basic books that are good idea. We all recommend that straight away because this guide has good vocabulary that could increase your knowledge in vocabulary, easy to understand, bit entertaining but nevertheless delivering the information. The article writer giving his/her effort to get every word into pleasure arrangement in writing Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books

on Mathematics) yet doesn't forget the main position, giving the reader the hottest along with based confirm resource information that maybe you can be among it. This great information may drawn you into fresh stage of crucial pondering.

Download and Read Online Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) By Juha Heinonen, Tero Kilpeläinen, Olli Martio, Mathematics #30WIOKFY1PE

Read Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) By Juha Heinonen, Tero Kilpeläinen, Olli Martio, Mathematics for online ebook

Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) By Juha Heinonen, Tero Kilpeläinen, Olli Martio, Mathematics 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 Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) By Juha Heinonen, Tero Kilpeläinen, Olli Martio, Mathematics books to read online.

Online Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) By Juha Heinonen, Tero Kilpeläinen, Olli Martio, Mathematics ebook PDF download

Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) By Juha Heinonen, Tero Kilpeläinen, Olli Martio, Mathematics Doc

Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) By Juha Heinonen, Tero Kilpeläinen, Olli Martio, Mathematics Mobipocket

Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) By Juha Heinonen, Tero Kilpeläinen, Olli Martio, Mathematics EPub

30WIOKFY1PE: Nonlinear Potential Theory of Degenerate Elliptic Equations (Dover Books on Mathematics) By Juha Heinonen, Tero Kilpeläinen, Olli Martio, Mathematics