Maximum Principles and Geometric Applications (Springer Monographs in Mathematics)

By Luis J. Alías, Paolo Mastrolia, Marco Rigoli

Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) By Luis J. Alías, Paolo Mastrolia, Marco Rigoli

This monograph presents an introduction to some geometric and analytic aspects of the maximum principle. In doing so, it analyses with great detail the mathematical tools and geometric foundations needed to develop the various new forms that are presented in the first chapters of the book. In particular, a generalization of the Omori-Yau maximum principle to a wide class of differential operators is given, as well as a corresponding weak maximum principle and its equivalent open form and parabolicity as a special stronger formulation of the latter.

In the second part, the attention focuses on a wide range of applications, mainly to geometric problems, but also on some analytic (especially PDEs) questions including: the geometry of submanifolds, hypersurfaces in Riemannian and Lorentzian targets, Ricci solitons, Liouville theorems, uniqueness of solutions of Lichnerowicz-type PDEs and so on.

Maximum Principles and Geometric Applications is written in an easy style making it accessible to beginners. The reader is guided with a detailed presentation of some topics of Riemannian geometry that are usually not covered in textbooks. Furthermore, many of the results and even proofs of known results are new and lead to the frontiers of a contemporary and active field of research.

Maximum Principles and Geometric Applications (Springer Monographs in Mathematics)

By Luis J. Alías, Paolo Mastrolia, Marco Rigoli

Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) By Luis J. Alías, Paolo Mastrolia, Marco Rigoli

This monograph presents an introduction to some geometric and analytic aspects of the maximum principle. In doing so, it analyses with great detail the mathematical tools and geometric foundations needed to develop the various new forms that are presented in the first chapters of the book. In particular, a generalization of the Omori-Yau maximum principle to a wide class of differential operators is given, as well as a corresponding weak maximum principle and its equivalent open form and parabolicity as a special stronger formulation of the latter.

In the second part, the attention focuses on a wide range of applications, mainly to geometric problems, but also on some analytic (especially PDEs) questions including: the geometry of submanifolds, hypersurfaces in Riemannian and Lorentzian targets, Ricci solitons, Liouville theorems, uniqueness of solutions of Lichnerowicz-type PDEs and so on.

Maximum Principles and Geometric Applications is written in an easy style making it accessible to beginners. The reader is guided with a detailed presentation of some topics of Riemannian geometry that are usually not covered in textbooks. Furthermore, many of the results and even proofs of known results are new and lead to the frontiers of a contemporary and active field of research.

Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) By Luis J. Alías, Paolo Mastrolia, Marco Rigoli Bibliography

- Sales Rank: #7518468 in Books
- Published on: 2016-02-13
- Original language: English
- Number of items: 1
- Dimensions: 9.21" h x 1.31" w x 6.14" l, .0 pounds
- Binding: Hardcover
- 570 pages

[⬇ **Download** Maximum Principles and Geometric Applications (Spr ...pdf](#)

[▤ **Read Online** Maximum Principles and Geometric Applications (S ...pdf](#)

Editorial Review

Review

"This is a very well-written book on an active area of research appealing to geometers and analysts alike, whether they are specialists in the field, or they simply desire to learn the techniques. Moreover, the applications included in this volume encompass a variety of directions with an accent on the geometry of hypersurfaces, while the high number of references dating from 2000 or later are a testimonial of the state of the art developments presented in this volume." (Alina Stancu, zbMATH 1346.58001, 2016)

From the Back Cover

This monograph presents an introduction to some geometric and analytic aspects of the maximum principle. In doing so, it analyses with great detail the mathematical tools and geometric foundations needed to develop the various new forms that are presented in the first chapters of the book. In particular, a generalization of the Omori-Yau maximum principle to a wide class of differential operators is given, as well as a corresponding weak maximum principle and its equivalent open form and parabolicity as a special stronger formulation of the latter.

In the second part, the attention focuses on a wide range of applications, mainly to geometric problems, but also on some analytic (especially PDEs) questions including: the geometry of submanifolds, hypersurfaces in Riemannian and Lorentzian targets, Ricci solitons, Liouville theorems, uniqueness of solutions of Lichnerowicz-type PDEs and so on.

Maximum Principles and Geometric Applications is written in an easy style making it accessible to beginners. The reader is guided with a detailed presentation of some topics of Riemannian geometry that are usually not covered in textbooks. Furthermore, many of the results and even proofs of known results are new and lead to the frontiers of a contemporary and active field of research.

Users Review

From reader reviews:

Paul Kline:

The knowledge that you get from Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) is a more deep you digging the information that hide in the words the more you get serious about reading it. It does not mean that this book is hard to be aware of but Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) giving you joy feeling of reading. The article writer conveys their point in selected way that can be understood by means of anyone who read the idea because the author of this book is well-known enough. This kind of book also makes your vocabulary increase well. So it is easy to understand then can go along, both in printed or e-book style are available. We propose you for having this Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) instantly.

Jennifer Fields:

The book untitled Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) contain a lot of information on the idea. The writer explains her idea with easy way. The language is very easy to understand all the people, so do not really worry, you can easy to read it. The book was compiled by famous author. The author gives you in the new period of literary works. You can easily read this book because you can please read on your smart phone, or model, so you can read the book in anywhere and anytime. If you want to buy the e-book, you can open up their official web-site and order it. Have a nice study.

Marcus Huskins:

In this age globalization it is important to someone to acquire information. The information will make professionals understand the condition of the world. The fitness of the world makes the information better to share. You can find a lot of sources to get information example: internet, magazine, book, and soon. You can view that now, a lot of publisher that will print many kinds of book. Typically the book that recommended for you is Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) this reserve consist a lot of the information of the condition of this world now. This specific book was represented how can the world has grown up. The language styles that writer value to explain it is easy to understand. The particular writer made some exploration when he makes this book. That's why this book suited all of you.

Toby Lowry:

That e-book can make you to feel relax. This particular book Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) was multi-colored and of course has pictures on there. As we know that book Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) has many kinds or style. Start from kids until adolescents. For example Naruto or Private eye Conan you can read and believe you are the character on there. Therefore not at all of book are generally make you bored, any it offers you feel happy, fun and chill out. Try to choose the best book in your case and try to like reading this.

Download and Read Online Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) By Luis J. Alías, Paolo Mastrolia, Marco Rigoli #J3WI7LADRB8

Read Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) By Luis J. Alías, Paolo Mastrolia, Marco Rigoli for online ebook

Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) By Luis J. Alías, Paolo Mastrolia, Marco Rigoli 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 Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) By Luis J. Alías, Paolo Mastrolia, Marco Rigoli books to read online.

Online Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) By Luis J. Alías, Paolo Mastrolia, Marco Rigoli ebook PDF download

Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) By Luis J. Alías, Paolo Mastrolia, Marco Rigoli Doc

Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) By Luis J. Alías, Paolo Mastrolia, Marco Rigoli Mobipocket

Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) By Luis J. Alías, Paolo Mastrolia, Marco Rigoli EPub

J3WI7LADRB8: Maximum Principles and Geometric Applications (Springer Monographs in Mathematics) By Luis J. Alías, Paolo Mastrolia, Marco Rigoli