

<<最优和平衡>>

图书基本信息

书名：<<最优和平衡>>

13位ISBN编号：9787506236591

10位ISBN编号：7506236591

出版时间：1998-3

出版时间：世界图书出版公司

作者：J.P.Aubin

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

<<最优和平衡>>

内容概要

As in ordinary language, metaphors may be used in mathematics to explain a given phenomenon by associating it with another which is (or is considered to be) more familiar. It is this sense of familiarity, whether individual or collective, innate or acquired by education, which enables one to convince oneself that one has understood the phenomenon in question. Contrary to popular opinion, mathematics is not simply a richer or more precise language. Mathematical reasoning is a separate faculty possessed by all human brains, just like the ability to compose or listen to music, to paint or look at paintings, to believe in and follow cultural or moral codes, etc. But it is impossible (and dangerous) to compare these various faculties within a hierarchical framework; in particular, one cannot speak of the superiority of the language of mathematics. Naturally, the construction of mathematical metaphors requires the autonomous development of the discipline to provide theories which may be substituted for or associated with the phenomena to be explained. This is the domain of pure mathematics. The construction of the mathematical corpus obeys its own logic, like that of literature, music or art. In all these domains, an aesthetic satisfaction is at once the objective of the creative activity and a signal which enables one to recognise successful works. (Likewise, in all these domains, fashionable phenomena - reflecting social consensus - are used to develop aesthetic criteria).

本书为英文版。

书籍目录

Introduction Part I. Nonlinear Analysis: Theory 1. Minimisation Problems: General Theorems 1.1 Introduction 1.2 Definitions 1.3 Epigraph 1.4 Lower Sections 1.5 Lower Semi-continuous Functions 1.6 Lower Semi-compact Functions 1.7 Approximate Minimisation of Lower Semi-continuous Functions on a Complete Space 1.8 Application to Fixed-point Theorems 2. Convex Functions and Proximation, Projection and Separation Theorems 2.1 Introduction 2.2 Definitions 2.3 Examples of Convex Functions 2.4 Continuous Convex Functions 2.5 The Proximation Theorem 2.6 Separation Theorems 2.6 Separation Theorems 3. Conjugate Functions and Convex Minimisation Problems 3.1 Introduction 3.2 Characterisation of Convex Lower Semi-continuous Functions 3.3 Fenchel's Theorem 3.4 Properties of Conjugate Functions 3.5 Support Functions 4. Subdifferentials of Convex Functions 4.1 Introduction 4.2 Definitions 4.3 Subdifferentiability of Convex Continuous Functions 4.4 Subdifferentiability of Convex Lower Semi-continuous Functions 4.5 Subdifferential Calculus 4.6 Tangent and Normal Cones 5. Marginal Properties of Solutions of Convex Minimisation Problems 5.1 Introduction 5.2 Fermat's Rule 5.3 Minimisation Problems with Constraints 5.4 Principle of Price Decentralisation 5.5 Regularisation and Penalisation 6. Generalised Gradients of Locally Lipschitz Functions 6.1 Introduction 6.2 Definitions 6.3 Elementary Properties 6.4 Generalised Gradients 6.5 Normal and Tangent Cones to a Subset 6.6 Fermat's Rule for Minimisation Problems with Constraints 7. Two-person Games. Fundamental Concepts and Examples 7.1 Introduction 7.2 Decision Rules and Consistent Pairs of Strategies 7.3 Brouwer's Fixed-point Theorem (1910) 7.4 The Need to Convexify: Mixed Strategies 7.5 Games in Normal (Strategic) Form 7.6 Pareto Optima 7.7 Conservative Strategies 7.8 Some Finite Games 7.9 Cournot's Duopoly 8. Two-person Zero-sum Games: Theorems of Von Neumann and Ky Fan 9. Solution of Nonlinear Equations and Inclusions 10. Introduction to the Theory of Economic Equilibrium 11. The Von Neumann Growth Model 12. n-person Games 13. Cooperative Games and Fuzzy Games Part . Nonlinear Analysis: Examples 15. Statements of Problems 16. Solutions to Problems Appendix 17. Compendium of Results References Subject Index

编辑推荐

As in ordinary language, metaphors may be used in mathematics to explain a given phenomenon by associating it with another which is (or is considered to be) more familiar. It is this sense of familiarity, whether individual or collective, innate or acquired by education, which enables one to convince oneself that one has understood the phenomenon in question. Contrary to popular opinion, mathematics is not simply a richer or more precise language. Mathematical reasoning is a separate faculty possessed by all human brains, just like the ability to compose or listen to music, to paint or look at paintings, to believe in and follow cultural or moral codes, etc. But it is impossible (and dangerous) to compare these various faculties within a hierarchical framework; in particular, one cannot speak of the superiority of the language of mathematics. Naturally, the construction of mathematical metaphors requires the autonomous development of the discipline to provide theories which may be substituted for or associated with the phenomena to be explained. This is the domain of pure mathematics. The construction of the mathematical corpus obeys its own logic, like that of literature, music or art. In all these domains, an aesthetic satisfaction is at once the objective of the creative activity and a signal which enables one to recognise successful works. (Likewise, in all these domains, fashionable phenomena - reflecting social consensus - are used to develop aesthetic criteria).

<<最优和平衡>>

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>