Record Nr. UNICASRML0510067

Autore Mohan, Ned

Titolo Analysis and control of electric drives : simulations and laboratory

implementation / Ned Mohan e Siddharth Raju

Pubbl/distr/stampa Hoboken: Wiley, 2021

ISBN 9781119584537

Descrizione fisica XXII, 538 p.; 24 cm.

Altri autori (Persone) Raju, Siddharth

Lingua di pubblicazione Italiano

Formato Materiale a stampa

Livello bibliografico Monografia

Record Nr. UNINA9910349545203321

Autore Bell John L

Titolo The Continuous, the Discrete and the Infinitesimal in Philosophy and

Mathematics / / by John L. Bell

Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,,

2019

ISBN 3-030-18707-1

Edizione [1st ed. 2019.]

Descrizione fisica 1 online resource (320 pages)

Collana The Western Ontario Series in Philosophy of Science, A Series of Books

in Philosophy of Science, Methodology, Epistemology, Logic, History of

Science, and Related Fields, , 1566-659X;; 82

Disciplina 190

510.1

Soggetti Mathematics—Philosophy

Philosophy

Logic, Symbolic and mathematical

Mathematical analysis Analysis (Mathematics) Geometry, Differential

Mathematics

History

Philosophy of Mathematics

History of Philosophy

Mathematical Logic and Formal Languages

Analysis

Differential Geometry History of Mathematical Sciences

Lingua di pubblicazione

Inglese

Formato

Materiale a stampa

Livello bibliografico

Monografia

Nota di bibliografia

Includes bibliographical references and index.

Nota di contenuto

Part I: The Continuous, the Discrete, and the Infinitesimal in the History of Thought -- Chapter 1. The Continuous and the Discrete in Ancient Greece, the Orient, and the European Middle Ages -- Chapter 2. The 16th and 17th Centuries: The Founding of the Infinitesimal Calculus --Chapter 3. The 18th and Early 19th Centuries: The Age of Continuity --Chapter 4. The Reduction of the Continuous to the Discrete in the 19th and early 20th Centuries -- Chapter 5. Dissenting Voices: Divergent Conceptions of the Continuum in the 19th and Early 20th Centuries --Part II: Continuity and Infinitesimals in Today's Mathematics -- Chapter 6. Topology -- Chapter 7. Category/Topos Theory -- Chapter 8. Nonstandard Analysis -- Chapter 9. The Constructive and Intuitionistic Continua -- Chapter 10. Smooth Infiniteimal Analysis/Synthetic Geometry.

Sommario/riassunto

This book explores and articulates the concepts of the continuous and the infinitesimal from two points of view: the philosophical and the mathematical. The first section covers the history of these ideas in philosophy. Chapter one, entitled 'The continuous and the discrete in Ancient Greece, the Orient and the European Middle Ages,' reviews the work of Plato, Aristotle, Epicurus, and other Ancient Greeks; the elements of early Chinese, Indian and Islamic thought; and early Europeans including Henry of Harclay, Nicholas of Autrecourt, Duns Scotus, William of Ockham, Thomas Bradwardine and Nicolas Oreme. The second chapter of the book covers European thinkers of the sixteenth and seventeenth centuries: Galileo, Newton, Leibniz, Descartes, Arnauld, Fermat, and more. Chapter three, 'The age of continuity,' discusses eighteenth century mathematicians including Euler and Carnot, and philosophers, among them Hume, Kant and Hegel. Examining the nineteenth and early twentieth centuries, the fourth chapter describes the reduction of the continuous to the discrete, citing the contributions of Bolzano, Cauchy and Reimann. Part one of the book concludes with a chapter on divergent conceptions of the continuum, with the work of nineteenth and early twentieth century philosophers and mathematicians, including Veronese, Poincaré, Brouwer, and Weyl. Part two of this book covers contemporary mathematics, discussing topology and manifolds, categories, and functors, Grothendieck topologies, sheaves, and elementary topoi. Among the theories presented in detail are non-standard analysis. constructive and intuitionist analysis, and smooth infinitesimal analysis/synthetic differential geometry. No other book so thoroughly covers the history and development of the concepts of the continuous and the infinitesimal. .