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Nota di contenuto	Intro -- COMPUTATIONAL MATHEMATICS: THEORY, METHODS AND APPLICATIONS -- COMPUTATIONAL MATHEMATICS: THEORY, METHODS AND APPLICATIONS -- CONTENTS -- PREFACE -- ANALYTICAL AND NUMERICAL METHODS IN THE LINEAR STABILITY STUDY OF IDEAL FLOWS ON A SPHERE -- ABSTRACT -- 1. INTRODUCTION -- 2. HILBERT SPACES AND GEOMETRIC STRUCTURE OF SMOOTH FUNCTIONS ON A SPHERE -- 3. INTEGRAL FORMULAS RELATED TO THE JACOBIAN -- Lemma 1 -- 4. STEADY BVE SOLUTIONS ON A ROTATING SPHERE -- 5. CONSERVATION LAW FOR PERTURBATIONS TO LP FLOWS AND RH WAVES -- Theorem 1 -- 6. CONSERVATION LAW FOR INFINITESIMAL PERTURBATIONS TO WV WAVES AND MODONS -- Theorem 2 -- 7. UNIFIED CONSERVATION LAW FOR DISTURBANCES OF BE SOLUTIONS -- 8. INSTABILITY CONDITIONS FOR LP FLOWS, RH WAVES, WV WAVES AND MODONS -- Theorem 3 -- Example 1 -- Example 2 -- Example 3 -- Theorem 4 -- 9. PECULIARITIES OF INSTABILITY CONDITIONS FOR WV WAVES AND MODONS -- 10. ESTIMATES OF THE MAXIMUM GROWTH RATE OF UNSTABLE MODES -- Theorem 5 -- Theorem 6 -- 11. ORTHOGONALITY OF UNSTABLE MODES TO THE BASIC FLOW (BVE SOLUTION) -- Theorem 7 -- Corollary 1 -- Corollary 2 -- 12. NUMERICAL EXPERIMENTS -- Experiment 1 -- Experiment 2 -- Experiment 3 -- Experiment 4 -- 13. CONCLUSIONS -- ACKNOWLEDGMENTS -- REFERENCES -- REVIEWED BY -- PURE AND MIXED MATHEMATICS IN THE WORK OF LEONHARD EULER -- ABSTRACT -- 1. INTRODUCTION -- 2. THE RISE OF THE CONCEPT OF FUNCTIONS

-- 3. ORDINARY DIFFERENTIAL EQUATIONS -- 4. DIFFERENTIATION AND INTEGRATION OF FUNCTIONS OF TWO VARIABLES -- 5. PARTIAL DIFFERENTIAL EQUATION -- 6. INFINITE POLYNOMIALS AND SERIES -- 7. MECHANICS -- 8. THE CALCULUS OF VARIATIONS AND THE PRINCIPLE OF THE LEAST ACTION -- 9. OTHER RESULTS IN MIXED MATHEMATICS -- REFERENCES -- APPLICATIONS OF COMPUTATIONAL GEOMETRY TO PROBLEMS OF POLITICAL COMPETITION -- ABSTRACT --

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Sommario/riassunto

Chareton gathers the latest research in this study of computational
 mathematics. He highlights such topics as coherence-homotopies of
 higher order, Vandermonde systems, numerical conformal mappings
 for waveguides, commutativity formulas for fundamental group
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Nota di contenuto	Cover; Title; Copyright; Dedication; Contents; List of contributors; Preface 1: Beyond the argument culture; Preface 2: Embracing fewer answers; List of abbreviations; 1 Introduction; Part I The idea of 'ecological economics': interdisciplinarity in theory, method and practice; 2 Social metabolism, ecological distribution conflicts and languages of valuation; 3 What lies beyond reductionism? Taking stock of interdisciplinary research in ecological economics; 4 The maturing of the structural contradictions of modern European science: an exploratory sketch 5 Beyond reductionism: understanding the 'ecology' of human naturePart II Life after reductionism: exemplary ecological economics beyond reductionism, in practice; 6 Building a career in the epistemological no man's land; 7 How ecofeminists use complexity in ecological economics; 8 Two conceptual tools for Multi-Scale Integrated Analysis of Societal and Ecosystem Metabolism (MuSIASEM):

'multi-purpose grammars' and 'impredicative loop analysis'; Part III Into the woods: mapping the challenges and the possibilities for continuing the development of methods that extend beyond reductionism
9 Looking for a place to anchor: confusing thoughts along an interdisciplinary dissertation journey
10 Probing the boundaries of resilience science in practice;
11 Beyond reductionism: issues for future research on sustainability; Index

Sommario/riassunto

This is a book about the work of scientists in the era of the Anthropocene: where human beings appear to have become a driving force in the evolution of the planet. It is a diverse collection of empirical, methodological and theoretical chapters concerned with the practice of interdisciplinary social-ecological systems research. The aim of the contributors is to give the reader an appreciation for the range and complexity of the challenges faced by researchers, research institutions and wider communities trying to make sense of the causes and consequences of the this new era of global enviro
