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| 1. Record Nr.           | UNINA990001040460403321  |
| Titolo                  | Teacher's Guide : Vol. V   |
| Pubbl/distr/stampa      | [S.I.] : Longmans, 1968  |
| Disciplina              | 530  |
| Locazione               | FI1  |
| Collocazione            | 20D-074.004  |
| Lingua di pubblicazione | Inglese  |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| 2. Record Nr.           | UNINA9910783720703321  |
| Titolo                  | Dynamics and bifurcation of patterns in dissipative systems [[electronic resource] /] / edited by Gerhard Dangelmayr, Iuliana Oprea                            |
| Pubbl/distr/stampa      | New Jersey ; London, : World Scientific, c2004   |
| ISBN                    | 1-281-88087-6<br>9786611880873<br>981-256-784-4  |
| Descrizione fisica      | 1 online resource (405 p.)   |
| Collana                 | World Scientific series on nonlinear science. Series B, Special theme issues and proceedings ; ; v. 12   |
| Altri autori (Persone)  | DangelmayrG <1951-> (Gerhard)<br>Oprealuliana  |
| Disciplina              | 530.4  |
| Soggetti                | Pattern formation (Physical sciences)<br>Bifurcation theory  |
| Lingua di pubblicazione | Inglese  |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| Note generali           | This book emerged from a conference of the same name organized by the editors in May 2003 at Colorado State University.  |
| Nota di bibliografia    | Includes bibliographical references and index.   |
| Nota di contenuto       | PREFACE; CONTENTS; CHAPTER 1 SYMMETRY AND PATTERN FORMATION ON THE VISUAL CORTEX; CHAPTER 2 MATRIX FREE APPROACH IN THE NUMERICAL ANALYSIS OF BIFURCATIONS AND |

INSTABILITIES; CHAPTER 3 VALIDITY OF THE GINZBURG-LANDAU APPROXIMATION IN PATTERN FORMING SYSTEMS WITH TIME PERIODIC FORCING; CHAPTER 4 STABILITY AND BIFURCATION FROM RELATIVE EQUILIBRIA AND RELATIVE PERIODIC ORBITS; CHAPTER 5 ROTATING MAGNETOCONVECTION WITH MAGNETOSTROPHIC BALANCE; CHAPTER 6 PATTERN FORMATION ON A SPHERE; CHAPTER 7 CONVERGENCE PROPERTIES OF FOURIER MODE REPRESENTATIONS OF QUASIPATTERNS CHAPTER 8 PHASE DIFFUSION AND WEAK TURBULENCE CHAPTER 9 PATTERN FORMATION AND PARAMETRIC RESONANCE; CHAPTER 10 MEAN FLOW EFFECTS IN MODEL EQUATIONS FOR FARADAY WAVES; CHAPTER 11 ROGUE WAVES AND THE BENJAMIN-FEIR INSTABILITY; CHAPTER 12 HETEROGENEOUS PACEMAKERS IN OSCILLATORY MEDIA; CHAPTER 13 A FINITE-DIMENSIONAL MECHANISM RESPONSIBLE FOR BURSTS IN FLUID MECHANICS; CHAPTER 14 BIOLOGICAL LATTICE GAS MODELS; CHAPTER 15 A COMPARISON OF OPTIMAL LOW DIMENSIONAL PROJECTIONS OF A HURRICANE SIMULATION CHAPTER 16 LINEAR AND NONLINEAR NUSSELT NUMBER MEASUREMENTS DURING ELECTROCONVECTION OF A LIQUID CRYSTAL CHAPTER 17 CHARACTERIZATIONS OF FAR FROM EQUILIBRIUM STRUCTURES USING THEIR CONTOURS; CHAPTER 18 DYNAMICS NEAR ROBUST HETEROCLINIC CYCLES; CHAPTER 19 INTERNAL DYNAMICS OF INTERMITTENCY; CHAPTER 20 EXPERIMENTS WITH DICTYOSTELIUM DISCOIDEUM AMOEBAE IN DIFFERENT GEOMETRIES; INDEX

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Sommario/riassunto

Understanding the spontaneous formation and dynamics of spatiotemporal patterns in dissipative nonequilibrium systems is one of the major challenges in nonlinear science. This collection of expository papers and advanced research articles, written by leading experts, provides an overview of the state of the art. The topics include new approaches to the mathematical characterization of spatiotemporal complexity, with special emphasis on the role of symmetry, as well as analysis and experiments of patterns in a remarkable variety of applied fields such as magnetoconvection, liquid crystals, gran

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