1. Record Nr. UNINA9910299965303321 Nonlinear Maps and their Applications : Selected Contributions from the Titolo NOMA 2011 International Workshop / / edited by Clara Grácio, Daniele Fournier-Prunaret, Tetsushi Ueta, Yoshifumi Nishio New York, NY:,: Springer New York:,: Imprint: Springer,, 2014 Pubbl/distr/stampa 1-4614-9161-4 **ISBN** Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (175 pages): illustrations Springer Proceedings in Mathematics & Statistics, . 2194-1009 : : 57 Collana Disciplina 511.326 Soggetti **Dynamics** Ergodic theory System theory Game theory **Biomathematics** Dynamical Systems and Ergodic Theory Complex Systems Game Theory, Economics, Social and Behav. Sciences Mathematical and Computational Biology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Bibliographic Level Mode of Issuance: Monograph Note generali Includes bibliographical references at the end of each chapter. Nota di bibliografia Nota di contenuto J. P. Almeida; A. A. Pinto; D. A. Rand, Renormalization of circle diffeomorphism sequences and Markov sequences -- F. Balibrea: M. V. Caballero, Examples of Lyapunov exponents in two dimensional systems -- R. A. da Costa; S. N. Dorogovtsev; A.V. Goltsev; J. F. F. Mendes, Characteristics of the explosive percolation transition -- E. S. Roberts: A. Annibale: A. C. C. Coolen, Controlled Markovian dynamics of graphs: unbiased generation of random graphs with prescribed topological properties -- G. Bettencourt, A case leading to rationalist of the drift -- L. S. Efremova, Remarks on the nonwandering set of skew products with a closed set of periodic points of the quotient map -- J. Erreira, Green route planner -- P. Gomes; N. Franco; L. Silva, Families of hyperbolic Lorenz knots -- C. Gracio; A. C. C. Coolen; A. Annibale, Cycle statistics in complex networks and Ihara's zeta function; Z.

B. Jemaa; D.Fournier-Prunaret; S. Belghith, Independence test of chaotic

sequences; Y. Kawai; T. Tsubone, Stability Transformation Method for Unstable Periodic Orbits and Its Realization; N. Klinshpont, Lorenz attractors and generalizations. Geometric and topological aspects; R. Lopez-Ruiz; E. Shivanian, A nonlinear map for the decay to equilibrium of ideal gases -- S. Mendes, On the dynamics of a cubic p-adic polynomial -- C. Serpa; J. Buescu, A dynamical approach to congruences: linking circle maps and aperiodic necklaces -- Y. Uwate; Y. Nishio, Complex pattern in a chain of couples maps based on neuron model with space and time-varying couplings.

Sommario/riassunto

In the field of Dynamical Systems, nonlinear iterative processes play an important role. Nonlinear mappings can be found as immediate models for many systems from different scientific areas, such as engineering, economics, biology, or can also be obtained via numerical methods permitting to solve non-linear differential equations. In both cases, the understanding of specific dynamical behaviors and phenomena is of the greatest interest for scientists. This volume contains papers that were presented at the International Workshop on Nonlinear Maps and their Applications (NOMA 2011) held in Évora, Portugal, on September 15-16, 2011. This kind of collaborative effort is of paramount importance in promoting communication among the various groups that work in dynamical systems and networks in their research theoretical studies as well as for applications. This volume is suitable for graduate students as well as researchers in the field.