

1. Record Nr.	UNINA9910156332203321
Titolo	First Complex Systems Digital Campus world e-conference 2015 // edited by Paul Bourguine, Pierre Collet, Pierre Parrend
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-45901-5
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (VIII, 424 p. 120 illus., 96 illus. in color.)
Collana	Springer Proceedings in Complexity, , 2213-8684
Disciplina	303.4833
Soggetti	Statistical physics Dynamical systems System theory Computational complexity Data mining Computational intelligence Biophysics Biological physics Complex Systems Complexity Data Mining and Knowledge Discovery Computational Intelligence Biological and Medical Physics, Biophysics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Welcome to CS-DC'15 -- Reconstructing multi-scale dynamics -- Machine learning methods -- A formal model to compute uncertain continuous data -- Knowledge maps -- Analysis of a Planetary Scale Scientific Collaboration Dataset Reveals Novel Patterns -- Epistemology of integrative and predictive sciences -- Information science and the complexity: are we orientated to a transdisciplinary science? -- Synthesis of ecology, biology and ethnographic data -- Bayesian Causalities, Mappings, and Phylogenies: A Social Science Gateway for

Modeling Complexity in Ethnographic, Archaeo-, Eco- and Bio-logical Variables -- Multi-level modeling -- Statistical and dynamical properties of networks -- Community detection as an efficient way to attack real networks -- From particles to complex matter -- Chemical garden -- Assembly of molecular metal oxides from the nano to the macroscale via chemical gardens -- Physics of complex systems -- Viscosity scaling in hydrodynamic instabilities in porous media -- A general approach to the linear stability analysis of miscible viscous fingering in porous media -- From individual to social cognition -- From individual to social cognition: Piaget, Jung and commons -- Ecological approach of sport and sport education -- Ecological Dynamics: a theoretical framework for understanding sport performance, physical education and physical -- Emerging dance movements under ecological constraints in Contact Improvisation dancers with different background -- Emerging collective shared behaviors from individual exploration in football small-sided games -- Adaptability in swimming pattern: how do swimmers adapt propulsive action as a function of speed? -- Backstroke start performance prediction -- Flexible perception-action strategies for follow-the-leader coordination -- Dynamic process of pulmonary data analysis: from the athlete mouth to the coach's hands -- From processing units to computational ecosystems to the cloud -- A multi-agent system approach to load-balancing and resource allocation for distributed computing -- Integrative science of education -- POEM-COPA Collaborative Open Peer Assessment -- Implications of agent-based computational modeling and simulation for preventive education in children with ADHD -- MOOC as a complex system -- From fields to territories to the planet -- Integrative logistics -- Logistics and Territory; integrative approach -- Process modeling of an international transport chain through the simulation tool SIMPROCESS -- Dynamic emissions reduction from vehicles with technical and behavioral approach -- 4p-factories (e-lab) -- Is the Lean Organisation a complex system? -- An artificial immune ecosystem model for hybrid cloud supervision -- Engineering of territory sustainability -- Spatialisation of Soil Erosion Susceptibility Using USLE Model -- Social patterns in multicultural environments Matrimonial patterns and trans-ethnic entities -- Economics as a complex evolutionist system -- A study of heterogeneity in a stock market simulator based on a model of agents that learn from experience in a market with multiple stocks -- Are innovation systems complex systems? -- From molecules to ecosphere -- Ocean biogeochemical dynamics -- Frontal systems as mechanisms of fish aggregation -- Lagrangian approach to phytoplankton mesoscale biogeography in the Kerguelen region -- Lyapunov exponents and oceanic fronts. .

Sommario/riassunto

This book contains the proceedings as well as invited papers for the first annual conference of the UNESCO Unitwin Complex System Digital Campus (CSDC), which is an international initiative gathering 120 Universities on four continents, and structured in ten E-Departments. First Complex Systems Digital Campus World E-Conference 2015 features chapters from the latest research results on theoretical questions of complex systems and their experimental domains. The content contained bridges the gap between the individual and the collective within complex systems science and new integrative sciences on topics such as: genes to organisms to ecosystems, atoms to materials to products, and digital media to the Internet. The conference breaks new ground through a dedicated video-conferencing system – a concept at the heart of the international UNESCO UniTwin, embracing scientists from low-income and distant countries. This book promotes

an integrated system of research, education, and training. It also aims at contributing to global development by taking into account its social, economic, and cultural dimensions. First Complex Systems Digital Campus World E-Conference 2015 will appeal to students and researchers working in the fields of complex systems, statistical physics, computational intelligence, and biological physics. .
