

1. Record Nr.	UNINA9910777497003321
Titolo	Scaling and disordered systems [[electronic resource]] : international workshop and collection of articles honoring Professor Antonio Coniglio on the occasion of his 60th birthday // editors, Fereydoon Family ... [et al.]
Pubbl/distr/stampa	Singapore ; ; River Edge, NJ, : World Scientific, 2002
ISBN	981-277-810-1
Descrizione fisica	1 online resource (361 p.)
Altri autori (Persone)	FamilyFereydoon
Disciplina	530.13
Soggetti	Order-disorder models Scaling laws (Statistical physics) Statistical physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"International workshop on scaling and disordered systems, Ecole superieure de physique et chimie industrielles, Paris, 13-14 April 2000."--P. xxi.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents ; Preface ; Antonio Coniglio: Curriculum Vitae ; Program of the Workshop ; Part I: Critical Phenomena; Fractal Dimensions and Corrections to Scaling for Critical Potts Clusters; Complex Viscoelastic Behaviour at the Sol-Gel Transition ; Scaling and Finite-Size Effects for the Critical Backbone Roughening Transition in Branching Polymers Percolation and Critical Phenomena of an Attractive Micellar System ; Thermally Diluted Ising Systems ; Critical Fluctuations in the Breakdown of Disordered Systems ; Critical Fluctuations in 2D XY Magnets ; Part II: Slow Dynamics Compaction of Granular Matter: A Short Review and the Random Tetris Model Why Conductivity Decreases with Pressure in Ion-Doped Polymers ; Dynamical Non-Linear Susceptibility of the Quenched and Annealed Frustrated Lattice Gas Models Lack of Equilibration in a Model for Continuously Supercooled Liquids

Effects of an Imposed Flow on Phase-Separating Binary Mixtures
; Fast Relaxation Time in a Spin Model with Glassy Behavior
; Molecular-Dynamics Studies of Biatomic Supercooled Liquids:
Intermittency, Stick-Slip Transition and the Breakdown of the Stokes-
Einstein Laws
Vortex Matter Out of Equilibrium On the
Statistical Properties of the Large Time Zero Temperature Dynamics of
the SK Model
; The Relationship Between the Scaling Parameter and Relaxation Time
for Non-Exponential Relaxation in Disordered Systems
; Slow Dynamics, Aging and History-Dependent Effects in the Parking-
Lot Model
Standard Scaling and Multiscaling in Phase Ordering Dynamics

Sommario/riassunto

Investigation of the fractal and scaling properties of disordered systems has recently become a focus of great interest in research. Disordered or amorphous materials, like glasses, polymers, gels, colloids, ceramic superconductors and random alloys or magnets, do not have a homogeneous microscopic structure. The microscopic environment varies randomly from site to site in the system and this randomness adds to the complexity and the richness of the properties of these materials. A particularly challenging aspect of random systems is their dynamical behavior. Relaxation in disordered systems
