

1. Record Nr.	UNINA9910141243703321
Autore	Janson Svante
Titolo	Random graphs // Svante Janson, Tomasz Luczak, Andrzej Rucinski
Pubbl/distr/stampa	New York, New York : , : John Wiley & Sons, Inc., , 2000 ©2000
ISBN	1-118-03271-3 1-118-03096-6
Descrizione fisica	1 online resource (350 p.)
Collana	Wiley-Interscience Series in Discrete Mathematics and Optimization
Disciplina	511.5 511/.5
Soggetti	Random graphs
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"A Wiley-Interscience Publication."
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Random Graphs; Preface; Contents; 1 Preliminaries; 1.1 Models of random graphs; 1.2 Notes on notation and more; 1.3 Monotonicity; 1.4 Asymptotic equivalence; 1.5 Thresholds; 1.6 Sharp thresholds; 2 Exponentially Small Probabilities; 2.1 Independent summands; 2.2 Binomial random subsets; 2.3 Suen's inequality; 2.4 Martingales; 2.5 Talagrand's inequality; 2.6 The upper tail; 3 Small Subgraphs; 3.1 The containment problem; 3.2 Leading overlaps and the subgraph plot; 3.3 Subgraph count at the threshold; 3.4 The covering problem; 3.5 Disjoint copies; 3.6 Variations on the theme; 4 Matchings 4.1 Perfect matchings 4.2 G-factors; 4.3 Two open problems; 5 The Phase Transition; 5.1 The evolution of the random graph; 5.2 The emergence of the giant component; 5.3 The emergence of the giant: A closer look; 5.4 The structure of the giant component; 5.5 Near the critical period; 5.6 Global properties and the symmetry rule; 5.7 Dynamic properties; 6 Asymptotic Distributions; 6.1 The method of moments; 6.2 Stein's method: The Poisson case; 6.3 Stein's method: The normal case; 6.4 Projections and decompositions; 6.5 Further methods; 7 The Chromatic Number; 7.1 The stability number 7.2 The chromatic number: A greedy approach 7.3 The concentration of the chromatic number; 7.4 The chromatic number of dense random graphs; 7.5 The chromatic number of sparse random graphs; 7.6

Vertex partition properties; 8 Extremal and Ramsey Properties; 8.1 Heuristics and results; 8.2 Triangles: The first approach; 8.3 The Szemerédi Regularity Lemma; 8.4 A partition theorem for random graphs; 8.5 Triangles: An approach with perspective; 9 Random Regular Graphs; 9.1 The configuration model; 9.2 Small cycles; 9.3 Hamilton cycles; 9.4 Proofs; 9.5 Contiguity of random regular graphs; 9.6 A brief course in contiguity; 10 Zero-One Laws; 10.1 Preliminaries; 10.2 Ehrenfeucht games and zero-one laws; 10.3 Filling gaps; 10.4 Sums of models; 10.5 Separability and the speed of convergence; References; Index of Notation; Index

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Sommario/riassunto

A unified, modern treatment of the theory of random graphs-including recent results and techniques. Since its inception in the 1960s, the theory of random graphs has evolved into a dynamic branch of discrete mathematics. Yet despite the lively activity and important applications, the last comprehensive volume on the subject is Bollobás's well-known 1998 book. Poised to stimulate research for years to come, this new work covers developments of the last decade, providing a much-needed, modern overview of this fast-growing area of combinatorics. Written by three highly respected members of the

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