

1. Record Nr.	UNISA996466527803316
Titolo	Asymptotic Combinatorics with Applications to Mathematical Physics [[electronic resource]] : A European Mathematical Summer School held at the Euler Institute, St. Petersburg, Russia, July 9-20, 2001 // edited by Anatoly M. Vershik
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2003
ISBN	3-540-44890-X
Edizione	[1st ed. 2003.]
Descrizione fisica	1 online resource (X, 250 p.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 1815
Disciplina	510 s 530.15/16
Soggetti	Applied mathematics Engineering mathematics Physics Combinatorics Group theory Functional analysis Partial differential equations Applications of Mathematics Physics, general Group Theory and Generalizations Functional Analysis Partial Differential Equations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Random matrices, orthogonal polynomials and Riemann — Hilbert problem -- Asymptotic representation theory and Riemann — Hilbert problem -- Four Lectures on Random Matrix Theory -- Free Probability Theory and Random Matrices -- Algebraic geometry, symmetric functions and harmonic analysis -- A Noncommutative Version of Kerov's Gaussian Limit for the Plancherel Measure of the Symmetric Group -- Random trees and moduli of curves -- An introduction to

harmonic analysis on the infinite symmetric group -- Two lectures on the asymptotic representation theory and statistics of Young diagrams -- III Combinatorics and representation theory -- Characters of symmetric groups and free cumulants -- Algebraic length and Poincaré series on reflection groups with applications to representations theory -- Mixed hook-length formula for degenerate a fine Hecke algebras.

Sommario/riassunto

At the Summer School Saint Petersburg 2001, the main lecture courses bore on recent progress in asymptotic representation theory: those written up for this volume deal with the theory of representations of infinite symmetric groups, and groups of infinite matrices over finite fields; Riemann-Hilbert problem techniques applied to the study of spectra of random matrices and asymptotics of Young diagrams with Plancherel measure; the corresponding central limit theorems; the combinatorics of modular curves and random trees with application to QFT; free probability and random matrices, and Hecke algebras.

2. Record Nr.	UNISA996465481303316
Autore	Nayak P. Pandurang
Titolo	Automated Modeling of Physical Systems [[electronic resource] /] / by P. Pandurang Nayak
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1995
ISBN	3-540-48520-1
Edizione	[1st ed. 1995.]
Descrizione fisica	1 online resource (XXII, 238 p.)
Collana	Lecture Notes in Artificial Intelligence ; ; 1003
Disciplina	003/.3
Soggetti	Computer simulation Physics Artificial intelligence Computers Computational complexity Electronics Microelectronics Simulation and Modeling Physics, general Artificial Intelligence Computation by Abstract Devices Complexity Electronics and Microelectronics, Instrumentation

Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Models and model fragments -- Adequate models -- Complexity of model selection -- Causal approximations -- Differential equations -- Order of magnitude reasoning -- Model selection program and results -- Related work -- Conclusions.
Sommario/riassunto	This book is based on the author's PhD thesis which was selected during the 1993 ACM Doctoral Dissertation Competition as one of the three best submissions. This monograph investigates the problem of selecting adequate models for reasoning about physical systems and applications to engineering problem solving. An elegant treatment of both the theoretical and practical sides are presented: the problem is precisely formalized, its computational complexity is analyzed in detail, and an efficient algorithm for finding adequate models is derived; on the practical side, a methodology for building systems that automatically construct adequate models is provided, and implementational aspects and tests are described.