

1. Record Nr.	UNISA996466155203316
Titolo	Efficient Approximation and Online Algorithms [[electronic resource]] : Recent Progress on Classical Combinatorial Optimization Problems and New Applications // edited by Euphratis Bampis, Klaus Jansen, Claire Kenyon
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2006
ISBN	3-540-32213-2
Edizione	[1st ed. 2006.]
Descrizione fisica	1 online resource (VII, 349 p.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 3484
Disciplina	005.1
Soggetti	Algorithms Computer science—Mathematics Discrete mathematics Numerical analysis Computer networks Computer graphics Discrete Mathematics in Computer Science Numerical Analysis Computer Communication Networks Computer Graphics
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 and index.
Nota di contenuto	Contributed Talks -- On Approximation Algorithms for Data Mining Applications -- A Survey of Approximation Results for Local Search Algorithms -- Approximation Algorithms for Path Coloring in Trees -- Approximation Algorithms for Edge-Disjoint Paths and Unsplittable Flow -- Independence and Coloring Problems on Intersection Graphs of Disks -- Approximation Algorithms for Min-Max and Max-Min Resource Sharing Problems, and Applications -- A Simpler Proof of Preemptive Total Flow Time Approximation on Parallel Machines -- Approximating a Class of Classification Problems -- List Scheduling in Order of ρ -Points on a Single Machine -- Approximation Algorithms for the k-Median Problem -- The Lovász-Local-Lemma and Scheduling.

2. Record Nr.	UNINA9910816671003321
Autore	Dorfman Abram
Titolo	Classical and modern engineering methods in fluid flow and heat transfer : an introduction for engineers and students // Abram Dorfman
Pubbl/distr/stampa	New York : , : Momentum Press, LLC, , [2013] ©2013
ISBN	1-299-28167-2 1-60650-271-9
Descrizione fisica	1 online resource (428 p.)
Disciplina	620.106
Soggetti	Fluid mechanics Heat - Transmission
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	List of figures -- List of examples -- Nomenclature -- Preface -- Acknowledgment -- About the author -- Part I. Classical methods in fluid flow and heat transfer -- 1. Methods in heat transfer of solids -- 1.1 Historical notes -- 1.2 Heat conduction equation and problem formulation -- 1.2.1 Cartesian coordinates -- 1.2.2 Orthogonal curvilinear coordinates -- 1.2.3 Universal function for heat flux on an arbitrary nonisothermal surface -- 1.2.4 Initial, boundary, and conjugate conditions -- Exercises 1.1-1.12 -- 1.3 Solution using error integral -- 1.3.1 An infinite solid or thin, laterally insulated rod -- 1.3.2 A semi-infinite solid or thin, laterally insulated rod -- 1.4 Duhamel's method -- 1.4.1 Duhamel integral derivation -- 1.4.2 Time-dependent surface temperature -- Exercises 1.13-1.27 -- 1.5 Method of separation variables -- 1.5.1 General approach, homogeneous, and inhomogeneous problems -- 1.5.2 One-dimensional unsteady problems -- 1.5.3 Orthogonality of Eigenfunctions -- Exercises 1.28-1.43 -- 1.5.4 Two-dimensional steady problems -- 1.6 Integral transforms -- 1.6.1 Fourier transform -- 1.6.2 Laplace transform -- 1.7 Green's function method -- Exercises 1.44-1.60 --

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Sommario/riassunto

This book presents contemporary theoretical methods in fluid flow and heat transfer, emphasizing principles of investigation and modeling of natural phenomena and engineering processes. It is organized into four parts and 12 chapters presenting classical and modern methods. Following the classical methods in Part 1, Part 2 offers in-depth coverage of analytical conjugate methods in convective heat transfer and peristaltic flow. Part 3 explains recent developments in numerical methods including new approaches for simulation of turbulence by direct solution of Navier-Stokes equations. Part 4 provides a wealth of applications in industrial systems, technology processes, biology, and medicine. More than a hundred examples show the applicability of the methods in such areas as nuclear reactors, aerospace, crystal growth, turbine blades, electronics packaging, optical fiber coating, wire casting, blood flow, urinary problems, and food processing.
