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Soggetti	Algorithms Numerical analysis Computer science - Mathematics Discrete mathematics Artificial intelligence Information technology - Management Operations research Numerical Analysis Discrete Mathematics in Computer Science Artificial Intelligence Computer Application in Administrative Data Processing Operations Research and Decision Theory
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Note generali	"A selection of papers from the 5th International Conference on the Practice and Theory of Automated Timetabling"--Pref.
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Nota di contenuto	General Issues -- Learning User Preferences in Distributed Calendar Scheduling -- Semantic Components for Timetabling -- An Open Interactive Timetabling Tool -- Distributed Choice Function Hyper-heuristics for Timetabling and Scheduling -- Transport Timetabling -- A Hybridised Integer Programming and Local Search Method for Robust Train Driver Schedules Planning -- Logistics Service Network Design for Time-Critical Delivery -- University Course Timetabling -- The

University Course Timetabling Problem with a Three-Phase Approach -- Minimal Perturbation Problem in Course Timetabling -- Feature Selection in a Fuzzy Student Sectioning Algorithm -- A Column Generation Scheme for Faculty Timetabling -- School Timetabling -- Decomposition and Parallelization of Multi-resource Timetabling Problems -- Interactively Solving School Timetabling Problems Using Extensions of Constraint Programming -- A Tiling Algorithm for High School Timetabling -- Project Scheduling -- Lower Bounds for the Multi-skill Project Scheduling Problem with Hierarchical Levels of Skills -- Examination Timetabling -- A Novel Similarity Measure for Heuristic Selection in Examination Timetabling -- A Tabu Search Hyper-heuristic Approach to the Examination Timetabling Problem at the MARA University of Technology -- A Hybrid Multi-objective Evolutionary Algorithm for the Uncapacitated Exam Proximity Problem -- Examination Timetabling with Fuzzy Constraints -- Fuzzy Multiple Heuristic Orderings for Examination Timetabling.

Sommario/riassunto

Thisvolumecontainsaselectionofpapersfromthe5thInternationalConference on the Practice and Theory of Automated Timetabling (PATAT 2004) held in Pittsburgh, USA, August 18–20, 2004. Indeed, as we write this preface, in the Summer of 2005, we note that we are about one month away from the tenth anniversary of the very ?rst PATAT conference in Edinburgh. Since those very early days, the conference series has gone from strength to strength and this volume represents the latest in a series of ?ve rigorously refereed volumes which showcase a broad spectrum of ground-breaking timetabling research across a very wide range of timetabling problems and applications. Timetabling is an area that unites a number of disparate ?elds and which cuts across a number of diverse academic disciplines. While the most obvious instances of timetabling occur in educational institutions, timetabling also - pears in sports applications, transportation planning, project scheduling, and many other ?elds. Viewing timetabling as a unifying theme enables researchers fromthesevariousareastolearnfromeachotherandtoextendtheirown-searchandpracticeinnewandinnovativeways. Thisvolumecontinuesthetrend of the conference series to extend the de?nition of timetabling beyond its edu- tional roots. In this volume, seven of the 19 papers involve domains other than education. Of course, educationaltimetabling remains at the coreof timetabling research, and the papers in this volume represent the full range of this area including exam timetabling, room scheduling, and class rostering.