Contents

Surveys

Recent Developments in Practical Course Timetabling ................. 3
M.W. Carter and G. Laporte

Space Allocation: An Analysis of Higher Education Requirements .. 20
E.K. Burke and D.B. Varley

Tabu Search and Simulated Annealing

Off-the-Peg or Made-to-Measure? Timetabling and Scheduling
with SA and TS ............................................................. 37
K.A. Dowsland

Generalised Assignment-Type Problems: A Powerful Modeling Scheme .... 53
J.A. Ferland

An Examination Scheduling Model to Maximize Students’ Study Time .... 78
B. Bullnheimer

A Comparison of Annealing Techniques for Academic Course Scheduling .. 92
M.A.S. Elmohamed, P. Coddington and G. Fox

Evolutionary Computation (Population Based Methods)

Some Observations about GA-based Exam Timetabling ............... 115
P. Ross, E. Hart and D. Corne

Experiments on Networks of Employee Timetabling Problems .. 130
A. Meisels and N. Lusternik

Evolutionary Optimisation of Methodist Preaching Timetables ........ 142
D. Corne and J. Ogden

Improving a Lecture Timetabling System for University-Wide Use .... 156
B. Paechter, R.C. Rankin and A. Cumming
Constraint Based Methods

A Constraint-Based Approach from Examination Timetabling Using Local Repair Techniques ....................................................... 169
P. David

Generating Complete University Timetables by Combining Tabu Search with Constraint Logic .................................................... 187
G.M. White and J. Zhang

Graph Theory

Construction of Basic Match Schedules (BMS) for Sports Competitions by Using Graph Theory .................................................. 201
A. van Weert and J.A.M. Schreuder

Practical Issues

A Standard Data Format for Timetabling Instances ....................... 213
E.K. Burke, J.H. Kingston and P.A. Pepper

Academic Scheduling ............................................................. 223
J.F. Blakesley, K.S. Murray, F.H. Wolf and D. Murray

The Implementation of a Central Timetabling System in a Large British Civic University ........................................................ 237
B. McCollum

A Brute Force and Heuristics Approach to Tertiary Timetabling........... 254
T. Nepal, S.W. Melville and M.I. Ally

Other Timetabling Presentations

A List of Other Conference Presentations .................................. 269

Author Index ................................................................. 273
Practice and Theory of Automated Timetabling II
Second International Conference, PATAT'97, Toronto, Canada, August 20 – 22, 1997, Selected Papers
Burke, E.; Carter, M. (Eds.)
1998, XII, 280 p., Softcover
ISBN: 978-3-540-64979-3