EURO
The Association of European Operational Research Societies

WATT
EURO Working Group on Automated Timetabling

PATAT 2014
10th International Conference on the Practice and Theory of Automated Timetabling
York, United Kingdom, Tuesday 26th - Friday 29th August 2014

Conference Programme

PATAT 2014
10th International Conference on the Practice and Theory of Automated Timetabling
York, United Kingdom, Tuesday 26th - Friday 29th August 2014

ASAP research group

CHORDS
Computational Heuristics Operational Research Decision-Support

EVENTMAP

Wednesday - 27th of Aug			
Time	**Harkers**	**Classic Suite**	**Hollies**
08:45	**General Announcements / Opening**		
09:00	Plenary : Pushing the Envelope: the role of slot scheduling in optimising the use of scarce airport resources *Prof Konstantinos G. Zografos*		
10:00	Break		
10:15	**Practical Timetabling** *Pedro Fernandes, Armando Barbosa and Luis Moreira* Bullet TimeTabler Education - System demonstration	**Staff Scheduling** *Jonas Ingels and Broos Maenhout* The Impact of Reserve Duties on Personnel Roster Robustness: An Empirical Investigation	**Transport Scheduling** *Balázs Dávid and Miklós Krész* A model and fast heuristics for the multiple depot bus rescheduling problem
10:40	*George Fonseca, Thaise Delfino and Haroldo Santos* A Web-Software to handle XHSTT Timetabling Problems	*Elmar Swarat, Guillaume Sagnol and Thomas Schlechte* Optimal Duty Rostering for Toll Enforcement Inspectors	*Nasser R. Sabar, Masri Ayob, Graham Kendall, Mohd Zakree and Ahmad Nazri* An Exponential Monte-Carlo Local Search Algorithm for the Berth Allocation Problem
11:05	*Yuri Bykov, Sanja Petrovic and Christos Braziotis* Do it yourself (DIY) optimisation approach to practical timetabling	*Andreas Klinkert* Large-Scale Rostering in the Airport Industry	*Ayad Turky, Salwani Abdullah and Nasser Sabar* Meta-heuristic algorithm for binary dynamic optimisation problems
11:30	Break		
11:45	**Practical Timetabling** *Egbert van der Veen* Translating historical sales data into workforce schedules	**Course Timetabling** *Jordan Rickman and Jay Yellen* Course Timetabling Using Graph Coloring and A.I. Techniques	**Project and Meeting Scheduling** *Niels-Christian Fink Bagger, Matilda Camitz and Thomas Stidsen* Dantzig-Wolfe decomposition of Meeting planning problems
12:10	*Daniel Karapetyan, Andrew Parkes, Jason Atkin and Juan Castro-Gutierrez* Lessons from Building an Automated Pre-Departure Sequencer for Airports	*Antony Phillips, Cameron Walker, Matthias Ehrgott and David Ryan* Minimised Disruption for Modification of University Course Timetables	*Haroldo Gambini Santos, Janniele Soares and Túlio Toffolo* Hybrid Local Search for The Multi-Mode Resource-Constrained Multi-Project Scheduling Problem
12:35	**Lunch**		
13:30	Plenary : Scheduling in an unknown, diverse consumer world *Paul Harrington and Geoffrey Forster*		
14:30	Break		
14:45	**Practical Timetabling** *Owen Clark and Andrew Olden* Meeting Rural Transport Needs through Demand Responsive Transport Scheduling (Bwcabus)	**Nurse Rostering** *Han Hoogeveen and Tim van Weelden* Personalized nurse rostering through linear programming	**Sports Scheduling** *Jari Kyngäs, Kimmo Nurmi, Nico Kyngäs, George Lilley and Thea Salter* Scheduling the Australian Football League
15:10	*Simon Kristiansen, Matias Sørensen and Thomas Stidsen* Integer Programming for the Generalized (High) School Timetabling Problem	*Pieter Smet, Peter Brucker, Patrick De Causmaecker and Greet Vanden Berghe* Polynomially solvable formulations for a class of nurse rostering problems	*Dries Goossens and Frits Spieksma* Indoor football scheduling
15:35	*Pedro Fernandes, Carla Pereira and Armando Barbosa* Bullet TimeTabler Education: latest improvements towards a more efficient timetabling	*Christopher Rae and Nelishia Pillay* Investigation into an evolutionary algorithm hyper-heuristic for the nurse rostering problem	*Túlio Toffolo, Sam Van Malderen, Tony Wauters and Greet Vanden Berghe* Branch-and-Price and Improved Bounds to the Traveling Umpire Problem
16:00	Break		
16:15	**Practical Timetabling** *Ahmad Muklason, Andrew J. Parkes, Barry McCollum and Ender Özcan* Fairness in Examination Timetabling Problems: A Survey and the New Problem Formulation	**High School Timetabling** *Matias Sørensen and Thomas K. Stidsen* Hybridizing Integer Programming and Metaheuristics for Solving High School Timetabling	**Resource Timetabling and Planning** *Elizabeth Rowse, Paul Harper, Rhyd Lewis and Jonathan Thompson* Set Partitioning Methods for Robust Scheduling: an Application to Operating Theatres
16:40	*Paul Ritchie* What makes a good student experience of Timetabling?	*Emir Demirović and Nysret Musliu* Solving High School Timetabling with SMT	*Nina Noeth and Peter Wilke* FlexMatch - A Matching Algorithm with linear Time and Space Complexity
17:05	*Michael Earl and Meg Stafford* Theory into Practice: A case study on the effect of academic programme structures on timetabling	*Jeffrey H. Kingston* KHE14: An Algorithm for High School Timetabling	_
17:30	**End**		

PATAT 2014

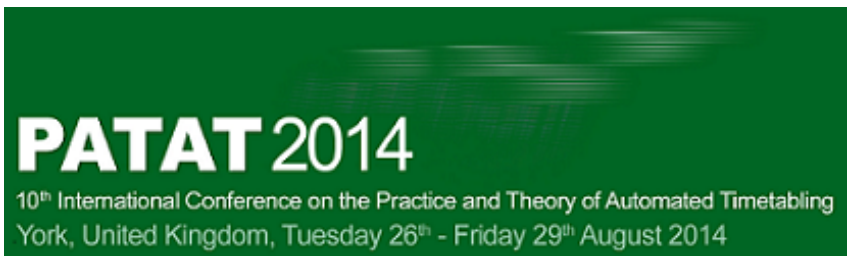
10th International Conference on the Practice and Theory of Automated Timetabling

York, United Kingdom, Tuesday 26th - Friday 29th August 2014

The last presenter in a session is the session chair. Please ensure that each talk in a session starts and ends on time.

Each presentation is allocated 25 minutes including a 5-minute Q&A.

Thursday - 28th of Aug			
Time	**Harkers**	**Classic Suite**	**Hollies**
09:00	Plenary : Visualising the diversity of benchmark instances and generating new test instances to elicit insights into algorithm performance *Prof Kate Smith-Miles*		
10:00	Break		
10:15	**Exam Timetabling** *Ali Hmer and Malek Mouhoub* A Multi-Phase Hybrid Metaheuristics Approach for the Exam Timetabling	**Staff Scheduling** *Broos Maenhout and Mario Vanhoucke* The impact of cyclic versus non-cyclic scheduling on the project staffing cost	**Class Timetabling** *Arton P. Dorneles, Olinto C. B. Araújo and Luciana S. Buriol* A Matheuristic Approach for the High School Timetabling Problem
10:40	*Christian John, Dietmar Tutsch, Reinhard Möller, Thomas Lepichand Bernard Beitz* A Criteria Transformation Approach to Timetabling based on Non-Linear Parameter Optimization	*Christopher Bayliss, Geert De Maere, Jason Atkin and Marc Paelinck* A Simulation Based Mixed Integer Programming Approach to Airline Reserve Crew Scheduling Under Uncertainty	*Oliver Czibula, Hanyu Gu, Aaron Russell and Yakov Zinder* A Multi-Stage IP-Based Heuristic for Class Timetabling and Trainer Rostering
11:05	*Lisa Katharina Bergmann, Kathrin Fischer and Sebastian Zurheide* A linear mixed integer model for realistic examination timetabling problems	*Richard Conniss, Tim Curtois, Sanja Petrovic and Edmund Burke* Rostering Air Traffic Controllers	*Nelishia Pillay* A Study of the Practical and Tutorial Scheduling Problem
11:30	Break		
11:45	**General Timetabling** *Gabriela Ochoa and Edmund Burke* HyperILS: An Effective Iterated Local Search Hyper-heuristic for Combinatorial Optimisation	**Shift Planning** *Alex Bonutti, Fabio De Cesco, Nysret Musliu and Andrea Schaerf* Modeling and Solving a Real-Life Multi-Skill Shift Design Problem	**Course Timetabling** *Alfian Gozali, Jimmy Tirtawangsa and Thomas Basuki* Asynchronous Island Model Genetic Algorithm For University Course Timetabling
12:10	*Johannes Ostler and Peter Wilke* Improvement by Combination -- How to increase the Performance of Optimization Algorithms by combining them	*Troels Martin Range, Richard Lusby and Jesper Larsen* Models for the Shift Design Problem	*Niels-Christian Fink Bagger,Thomas Stidsen and Jesper Larsen* Room Allocation Optimisation at the Technical University of Denmark
12:35	**Lunch**		
13:30	Plenary : "Mine's better than yours" – comparing timetables and timetabling algorithms *Prof Ben Paechter*		
14:30	Break		
14:45	**Educational Timetabling** *Jeffrey H. Kingston* Integrated Student Sectioning	**Staff Scheduling** *Přemysl Šůcha, István Módos, Roman Václavík, Jan Smejkal and Zdeněk Hanzálek* Online Scheduling System for Server Based Personnel Rostering Applications	**Exam Timetabling** *Vasileios Kolonias, George Goulas, Panayiotis Alefragis, Christos Gogos and Efthymios Housos* GPU acceleration of a memetic algorithm for the Examination Timetabling Problem
15:10	*Moritz Muehlenthaler and Rolf Wanka* The Connectedness of Clash-free Timetables	*Komarudin, Marie-Anne Guerry, Pieter Smet, Tim De Feyter and Greet Vanden Berghe* A two-phase heuristics and a lexicographic rule for improving fairness in personnel rostering	*Ryan Hamilton-Bryce, Paul McMullan and Barry McCollum* Directed Selection using Reinforcement Learning for the Examination Timetabling Problem
15:35	*Carlos Sanchez* Timetabling in Higher Education: Considering the Combinations of Classes that Students Take	*Tal Grinshpoun, Hagai Ilani and Elad Shufan* Partially-Concurrent Open Shop Scheduling	*Michele Battistutta, Andrea Schaerf and Tommaso Urli* Feature-based tuning of single-stage simulated annealing for examination timetabling
16:00	Break		
16:15	**Exam Timetabling** *Hana Rudová, Jiří Rousek and Radoslav Štefánik* Master State Examination Timetabling	**Task and Team Scheduling** *Aldy Gunawan, Zhi Yuan and Hoong Chuin Lau* A Mathematical Model and Metaheuristics for Time Dependent Orienteering Problem	**Planning** *Gerhard Post and Martin Schoenmaker* Planning the Amusing Hengelo Festival
16:40	*Taha Arbaoui, Jean-Paul Boufflet, Kewei Hu and Aziz Moukrim* Exam timetabling at Université de Technologie de Compiègne: a memetic approach	*Panayiotis Alefragis, Christos Gogos, Christos Valouxis, George Goulas and Nikolaos Voros* Assigning and Scheduling Hierarchical Task Graphs to Heterogenous Resources	*Guillermo Durán, Sebastián Cea, Mario Guajardo, Denis Sauré and Gonzalo Zamorano* FIFA Ranking and World Cup Football Groups: Quantitative Methods for a Fairer System
17:05	*Cevriye Altıntaş, Shahriar Asta, Ender Özcan and Tuncay Yiğit* A self-generating memetic algorithm for examination timetabling	*Mustafa Mısır and Hoong Chuin Lau* Diversity-Oriented Bi-Objective Hyper-heuristics for Patrol Scheduling	*David Mcgillicuddy, Andrew J. Parkes and Henrik Nilsson* An Investigation Into the Use of Haskell for Dynamic Programming
17:30	**End**		



The last presenter in a session is the session chair. Please ensure that each talk in a session starts and ends on time.

Each presentation is allocated 25 minutes including a 5 minute Q&A.

Friday - 29th of Aug			
Time	**Harkers**	**Classic Suite**	**Hollies**
09:00	Plenary : Passenger oriented railway disruption management by adapting timetables and rolling stock schedules *Prof Leo Kroon*		
10:00	Break		
10:15	**Airport Transportation** *Jason A D Atkin, Geert De Maere and Edmund K Burke* The Effects of the Planning Horizon on Heathrow TSAT Allocation	**Nurse Rostering** *Shahriar Asta and Ender Özcan* A Tensor-based Approach Learning the Heuristics Space for Nurse Rostering	
10:40	*Alexander Brownlee, Jason Atkin, John Woodward, Una Benlic and Edmund K Burke* Airport Ground Movement: Real World Data Sets and Approaches to Handling Uncertainty	*Sara Ceschia, Nguyen Thi Thanh Dang, Stefaan Haspeslagh, Patrick De Causmaecker and Andrea Schaerf* The second International Nurse Rostering Competition	
11:05	Break		
11:10	**Closing Session**		
11:30	**End**		
12:30	**Lunch**		

Note: Please note that alterations may be required to the timings of some talks. A definitive timetable shall be made available at the conference.
All plenary presentations and opening/closing sessions will take place in the Classic Suite.
This document can be reached from http://www.patatconference.org/patat2014/programme.pdf

PATAT 2014
10th International Conference on the Practice and Theory of Automated Timetabling
York, United Kingdom, Tuesday 26th - Friday 29th August 2014

The last presenter in a session is the session chair. Please ensure that each talk in a session starts and ends on time.

Each presentation is allocated 25 minutes including a 5 minute Q&A.