

8 SESSION SCHEDULE

THE ELEVENTH INTERNATIONAL CONFERENCE ON ADVANCED SYSTEMS FOR PUBLIC TRANSPORT (CASPT 09)

20 – 22 July 2009, Hong Kong

20 July 2009 (Monday)

Time	Event			
08:30 – 09:00	Registration Pre-Function Area			
09:00 – 09:30	Welcome Addresses Picasso Room			
09:30 – 10:10	Keynote Presentation by Dorothy Chan Picasso Room			
10:10 – 10:40	Coffee Break Pre-Function Area			
10:40 – 11:20	Keynote Presentation by Nigel H.M. Wilson Picasso Room			
11:20 – 12:00	Keynote Presentation by S.C. (Chan) Wirasinghe and U. Vandebona Picasso Room			
12:00 – 13:45	Conference Lunch Academy Room, 1/F			
13:45 – 15:00	Session A1 Picasso Room	Session A2 Monet Room A	Session A3 Monet Room B	Session A4 Picasso Room B
	Planning and Policy I	Scheduling	Air Transportation	Automatic Vehicle Location Systems
15:00 – 15:30	Coffee Break Pre-Function Area			
15:30 – 16:45	Session B1 Picasso Room	Session B2 Monet Room A	Session B3 Monet Room B	Session B4 Picasso Room B
	Planning and Policy II	Transfer Management	Demand Analysis	Transit Service Design
16:45 – 18:00	Break			
18:00 – 20:00	Welcome Reception Monet Room A and B			

SESSION SCHEDULE 9**20 July 2009 (Monday)****Abstract**

Welcome Addresses Picasso Room	
09:00 – 09:10	Welcome Address by Roland T.H. Chin <i>Vice-President for Academic Affairs, The Hong Kong University of Science and Technology</i>
09:10 – 09:20	Welcome Address by William H.L. Lam <i>President, Hong Kong Society for Transportation Studies</i>
09:20 – 09:30	Opening Address by Hong K. Lo <i>Conference Chair</i> <i>Department of Civil and Environmental Engineering, The Hong Kong University of Science and Technology</i>
Keynote Presentation Picasso Room	
09:30 – 10:10	Transport Development - Review and Challenges p. 25 Dorothy Chan <i>Deputy Director, School of Professional and Continuing Education, The University of Hong Kong; Former Deputy Commissioner for Transport</i>
10:10 – 10:40	Coffee Break Pre-Function area
Keynote Presentation Picasso Room	
10:40 – 11:20	Evolving Relationships among Operations Planning, Operations Control, Passenger Information and Fare Payment in the Urban Public Transport Industry p. 26 Nigel H.M. Wilson <i>Massachusetts Institute of Technology, USA</i>
Keynote Presentation Picasso Room	
11:20 – 12:00	Public Transport Analysis: Back to Basics p. 27 S.C. (Chan) Wirasinghe and U. Vandebona <i>University of Calgary, Canada; University of New South Wales, Australia</i>
12:00 – 13:45	Conference Lunch Academy Room, 1/F
Session A1: Planning and Policy I (Picasso Room) <i>Session Chair: Barbara W.Y. Siu</i>	
13:45 – 14:10	Optimal coordination strategy for an integrated multi-modal and multi-operator transit system (MS-54) p.33 Soi Hoi Lam, Shoujie Li and Yiik Diew Wong
14:10 – 14:35	Pareto Efficient Strategies for Regulating Public Transit Operations (MS-57) p. 34 Qiong Tian, Hai Yang and Haijun Huang
14:35 – 15:00	The influence analysis of policies to public transit (MS-66) p. 35 Haiyan Wu, Jianxin Lin and Chenhai Ouyang

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20 July 2009 (Monday)
Abstract

Session A2: Scheduling (Monet Room A)		
<i>Session Chair: Robert L. Bertini</i>		
13:45 – 14:10	Effect of driving-time determination and holding points on reliability (MS-9) N. van Oort, J.W. Boterman and R. van Nes	p. 36
14:10 – 14:35	Integrated timetabling and vehicle scheduling in practice (MS-83) Charles Fleurent and Réjean Lessard	p. 37
14:35 – 15:00	A Multi-Level Framework for Generating Timetables in Highly Utilized Railway Networks (MS-101) Gabrio Caimi, Martin Fuchsberger, Marco Laumanns and Kaspar Schüpbach	p. 38
Session A3: Air Transportation (Monet Room B)		
<i>Session Chair: Mark Hickman</i>		
13:45 – 14:10	The TSAT Allocation System at London Heathrow: the relationship between slot compliance, throughput and equity (MS-125) Jason A.D. Atkin, Edmund K. Burke and John S. Greenwood	p. 39
14:10 – 14:35	Multi-objective approaches to investigate airline schedule robustness: the 3-objective case (MS-128) Edmund K. Burke, Patrick De Causmaecker, Geert De Maere, Jeroen Mulder and Marc Paelinck	p. 40
14:35 – 15:00	Statistical mechanics for analytic planning: An application to domestic air traffic in China (MS-137) Hans Huber and Shailesh Mehta	p. 41
Session A4: Automatic Vehicle Location Systems (Picasso Room B)		
<i>Session Chair: Jane Lin</i>		
13:45 – 14:10	Investigation in Real-Time Bus Headway Reliability Measure (MS-12) Jie (Jane) Lin and Minyan Ruan	p. 42
14:10 – 14:35	Identifying Recurring Congestion on Urban Streets using Automated Vehicle Location-equipped Transit Buses as Probes (MS-117) Rabi G. Mishalani, Prem Goel, Mark M. McCord, Cheng Chen and Jinguo Gao	p. 43
14:35 – 15:00	Assignment-based Methodology to Match Automated Vehicle Location Transit Bus Trip Trajectories to Schedules (MS-118) Yuxiong Ji, Rabi G. Mishalani and Mark M. McCord	p. 44
15:00 – 15:30	Coffee Break Pre-function Area	
Session B1: Planning and Policy II (Picasso Room)		
<i>Session Chair: W.Y. Szeto</i>		
15:30 – 15:55	The Research of Public Transport Policy Support the Commuter Travel more Sustainable (MS-99) Haiyan Wu and Chenghai Ouyang	p. 45
15:55 – 16:20	Integrated public transit priority strategies (MS-109) Giuseppe Bellei and Konstantinos Gkoumas	p. 46
16:20 – 16:45	Assessment of public private partnership models for mass rail transit - an influence diagram approach (MS-131) S. Tang and Hong K. Lo	p. 47

SESSION SCHEDULE 11**20 July 2009 (Monday)****Abstract**

Session B2: Transfer Management (Monet Room A)		
<i>Session Chair: Amer Shalaby</i>		
15:30 – 15:55	Transfer Behavior and Transfer Planning in Public Transport Systems: A Case of the London Underground (MS-28) Zhan Guo and Nigel H.M. Wilson	p. 48
15:55 – 16:20	Development of a Holding Control Model for Real-Time Connection Protection (MS-62) Eui-Hwan Chung and Amer Shalaby	p. 49
16:20 – 16:45	The Transfer Penalty Measurement of the Regional Railway Stations (MS-65) Hye-Ran Kim, Hwang-bae Kim and Jin-hee Choi	p. 50
Session B3: Demand Analysis (Monet Room B)		
<i>Session Chair: David Z.W. Wang</i>		
15:30 – 15:55	Empirical Comparison of Urban Rail Network Demand Models: A Case Study in the Tokyo Metropolitan Area (MS-32) Hironori Kato, Yuichiro Kaneko and Masashi Inoue	p. 51
15:55 – 16:20	Financial Sustainability of Rail Transit Service: the effect of Urban development pattern (MS-119) David Z. W. Wang and Hong K. Lo	p. 52
16:20 – 16:45	Influence of vacant taxi driver's customer searching strategy on taxi system performance (MS-129) Shi Wen, C.O. Tong, S.C. Wong and Hai Yang	p. 53
Session B4: Transit Service Design (Picasso Room B)		
<i>Session Chair: Pitu Mirchandani</i>		
15:30 – 15:55	Design of express services for an urban bus corridor with capacity constraints (MS-92) Juan Carlos Muñoz, Ricardo Giesen, Homero Larrain and Carola Leiva	p. 54
15:55 – 16:20	Bus network design: procedure and application in large urban areas (MS-105) E. Cipriani, S. Gori, and M. Petrelli	p. 55
16:20 – 16:45	2-Vehicle Zone Optimal Design for Feeder Transit Services (MS-106) Xiugang Li and Luca Quadrifoglio	p. 56
16:45 – 18:00	Break	
18:00 – 20:00	Welcome Reception Monet Room A and B	

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21 July 2009 (Tuesday)

Time	Event			
09:00 – 09:40	Keynote Presentation by Stephen Chik Picasso Room			
09:40 – 10:20	Keynote Presentation by Avishai (Avi) Ceder Picasso Room			
10:20 – 10:45	Coffee Break Pre-Function Area			
10:45 – 12:00	Session C1 Picasso Room A Travel Behaviour	Session C2 Monet Room A Transit Performance	Session C3 Monet Room B Operations, Control and Management	Session C4 Picasso Room B Flexible Transit Modes
12:00 – 14:00	Conference Lunch Academy Room, 1/F		International Scientific Committee Lunch Meeting	
14:00 – 18:00	Technical Tours			
18:00 – 21:00	Conference Dinner Jumbo Floating Restaurant, Shum Wan, Aberdeen Note: Buses will be arranged at entrance of the conference hotel at 18:00 to bring participants to the dinner venue			

SESSION SCHEDULE 13**21 July 2009 (Tuesday)****Abstract**

Keynote Presentation Picasso Room		
09:00 – 09:40	Railway Development in Hong Kong Stephen Chik <i>Chief Civil and Planning Engineer, MTR Corporation Limited</i>	p. 28
Keynote Presentation Picasso Room		
09:40 – 10:20	Public-Transport Connectivity Measures and Performance within the Operations Planning Process Avishai (Avi) Ceder <i>University of Auckland, New Zealand; Technion, Israel</i>	p. 29
10:20 – 10:45	Coffee Break Pre-Function Area	
Session C1: Travel Behaviour (Picasso Room) <i>Session Chair: Yasuo Asakura</i>		
10:45 – 11:10	Understanding travel behavior of public transportation user in Indonesian Metropolitan areas (MS-63) Tri Basuki Joewono, Yusak O. Susilo and Wimpy Santosa	p. 57
11:10 – 11:35	Estimation of Behavioural Change of Railway Passengers Using Smart Card Data (MS-68) Y. Asakura, T. Iryo, Y. Nakajima and T. Kusakabe	p. 58
11:35 – 12:00	Destination station choice analysis using hybrid choice model and smart card data (MS-71) Chong Wei, Takamasa Iryo and Yasuo Asakura	p. 59
Session C2: Transit Performance (Monet Room A) <i>Session Chair: Nigel H.M. Wilson</i>		
10:45 – 11:10	The causal relationship of the service quality of TransJakarta Busway (MS-15) Tri Basuki Joewono and Dhany Utami Ningtyas	p. 60
11:10 – 11:35	The Evaluation of Customer Satisfaction Degree for Public Transit Industry (MS-37) Lixin Miao, Xiaobo Qu and Zhanwu Zhang	p. 61
11:35 – 12:00	Service Quality Measurement in Urban Rail Networks with Data from Automated Fare Collection Systems (MS-86) Michael Frumin, David Uniman, Nigel H.M. Wilson, Rabi Mishalani and John Attanucci	p. 62
Session C3: Operations, Control and Management (Monet Room B) <i>Session Chair: Leo G. Kroon</i>		
10:45 – 11:10	Evaluation of controlling measures for light rail applied in practice (MS-10) N. van Oort and R. van Nes	p. 63
11:10 – 11:35	Centralized versus distributed railway traffic control (MS-18) F. Corman, A. D'Ariano, D. Pacciarelli and M. Pranzo	p. 64

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21 July 2009 (Tuesday)		Abstract
11:35 – 12:00	Analysis of Bus Boarding Limits Real-time Control Strategy: When and How much limiting Bus Boarding improve performance? (MS-87) Felipe Delgado, Juan Carlos Muñoz, Ricardo Giesen and Aldo Cipriano	p. 65
Session C4: Flexible Transit Modes (Picasso Room B) <i>Session Chair: Hai Yang</i>		
10:45 – 11:10	Door-to-door DRT assignment model considering travellers mode choice (MS-82) Fumitaka Kurauchi, Min Guo and Agachai Sumalee	p. 66
11:10 – 11:35	A general framework for designing demand responsive transit service (MS-96) Yuh-Jen Cho, Yi-An Chen and Suei-Han Gao	p. 67
11:35 – 12:00	Meeting functions and returns to scales in urban taxi services (MS-135) Teng Yang, Hai Yang and S.C. Wong	p. 68
12:00 – 14:00	Conference Lunch Academy Room, 1/F	International Scientific Committee Lunch Meeting
Technical Tours		
14:00 – 18:00	Tour A: Hong Kong Shipyard Tour B: Hong Kong Tramways Tour C: KMB Lai Chi Kok Depot Tour D: The Hong Kong RFID Centre	
18:00 – 21:00	Conference Dinner Jumbo Floating Restaurant, Shum Wan, Aberdeen Note: Buses will be arranged at entrance of conference hotel at 18:00 to bring participants to the dinner venue	

SESSION SCHEDULE 15**22 July 2009 (Wednesday)**

Time	Event			
09:00 – 09:40	Keynote Presentation by Stefan Voss Picasso Room			
09:40 – 10:20	Keynote Presentation by Pitu Mirchandani Picasso Room			
10:20 – 10:45	Coffee Break Pre-Function Area			
10:45 – 12:00	Session D1 Picasso Room	Session D2 Monet Room A	Session D3 Monet Room B	Session D4 Picasso Room B
	Bus Operations I	Transit Assignment I	Crew Scheduling I	Heuristics I
12:00 – 13:30	Conference Lunch Academy Room, 1/F			
13:30 – 14:45	Session E1 Picasso Room	Session E2 Monet Room A	Session E3 Monet Room B	Session E4 Picasso Room B
	Bus Operations II	Transit Assignment II	Crew Scheduling II	Heuristics II
14:45 – 15:15	Coffee Break Pre-Function Area			
15:15 – 16:30	Session F1 Picasso Room A	Session F2 Monet Room A	Session F3 Monet Room B	Session F4 Picasso Room B
	Transfer Management	Pricing	Information Technology in Transport	Heuristics III
16:30 – 17:00	Closing Ceremony Picasso Room			

16 **SESSION SCHEDULE****22 July 2009 (Wednesday)****Abstract**

Keynote Presentation		
Picasso Room		
09:00 – 09:40	Public Transport: Where we are and where we go Stefan Voss <i>University of Hamburg, Germany</i>	p. 30
Keynote Presentation		
Picasso Room		
09:40 – 10:20	Transit Signal Priority: Pros and Cons? (MS-22) Pitu Mirchandani <i>Arizona State University, USA</i>	p. 31, 32
10:20 – 10:45	Coffee Break Pre-Function Area	
Session D1: Bus Operations I (Picasso Room)		
<i>Session Chair: Avi Ceder</i>		
10:45 – 11:10	Scheduling-based bus operational-parking solution (MS-23) Avishai (Avi) Ceder and Gali Israel	p. 69
11:10 – 11:35	Optimal Bus Fleet Management Strategies In A Congested Road Network (MS-61) CO Tong	p. 70
11:35 – 12:00	Using Archived Stop-Level Transit Data for Assessing Bus Operations and Exploring Optimal Stop Spacing (MS-116) Huan Li, Robert L. Bertini and Ahmed M. El-Geneidy	p. 71
Session D2: Transit Assignment I (Monet Room A)		
<i>Session Chair: Jan-Dirk Schmöcker</i>		
10:45 – 11:10	Reliability-based stochastic transit assignment with capacity constraints (MS-29) W.Y. Szeto, Muthu Solayappan and K.I. Wong	p. 72
11:10 – 11:35	A dynamic frequency-based assignment model for congested transit networks using probit-based stochastic user equilibrium (MS-50) Younes Hamdouch and Siriphong Lawphonganich	p. 73
11:35 – 12:00	Transit Assignment Model Considering the Inter-dependent of Each Line's Arrival (MS-69) Hiroshi Shimamoto, Fumitaka Kurauchi, Jan-Dirk Schmöcker and Michael G.H. Bell	p. 74
Session D3: Crew Scheduling I (Monet Room B)		
<i>Session Chair: Juan Carlos Muñoz</i>		
10:45 – 11:10	Assignment of work shifts to public transit drivers based on stated preferences (MS-53) Sonia Montalva, Juan Carlos Muñoz and Ricardo Paredes	p. 75
11:10 – 11:35	Train Driver Rescheduling applying Actor-Agent Techniques (MS-88) Erwin J.W. Abbink, David G.A. Mobach, Pieter J. Fiiole, Leo G. Kroon, Eddy H.T. van der Heijden and Niek J.E. Wijngaards	p. 76
11:35 – 12:00	Multiple depot vehicle and crew scheduling with time windows for scheduled trips (MS-104) Natalia Kliewer, Bastian Amberg and Boris Amberg	p. 77

SESSION SCHEDULE 17**22 July 2009 (Wednesday)****Abstract**

Session D4: Heuristics I (Picasso Room B)		
<i>Session Chair: Seungjae Lee</i>		
10:45 – 11:10	Global Solution Algorithms for a transit route design (MS-17) Seungjae Lee and Jonghak Han	p. 78
11:10 – 11:35	Algorithmic Approaches to the Capacitated Delay Management Problem (MS-44) Michael Schachtebeck	p. 79
11:35 – 12:00	A Stochastic Multiple Area Approach for Public Transport Network Design (MS-79) Bernhard Alt and Ulrich Weidmann	p. 80
Conference Lunch Academy Room, 1/F		
Session E1: Bus Operations II (Picasso Room)		
<i>Session Chair: C.O. Tong</i>		
13:30 – 13:55	Exploring user behavior on the TransJakarta Busway using the stated preference method (MS-16) Tri Basuki Joewono, Adi Prasetyo Raharjo and Almeida Andes Sudrajat	p. 81
13:55 – 14:20	An Analysis of Efficiency of the Seoul's Exclusive Bus Routes using Data Envelopment Analysis (MS-38) Jin-Seok Hahn, Hye-Ran Kim and Seung-young Kho	p. 82
14:20 – 14:45	Study of the impact of exclusive bus lane under highly heterogeneous traffic condition (MS-84) V. Thamizh Arasan and P. Vedagiri	p. 83
Session E2: Transit Assignment II (Monet Room A)		
<i>Session Chair: Fumitaka Kurauchi</i>		
13:30 – 13:55	Frequency-based assignment with consideration of seat availability (MS-80) Jan-Dirk Schmöecker, Michael G.H. Bell, Fumitaka Kurauchi and Hiroshi Shimamoto	p. 84
13:55 – 14:20	The Multi-Class Schedule-Based Transit Assignment Model in Network with Uncertainties (MS-93) Yuqing Zhang, William H.K. Lam, Agachai Sumalee, Hong K. Lo and C.O. Tong	p. 85
14:20 – 14:45	An Approach for Integrated Dynamic Transit and Traffic Simulation and Assignment (MS-123) Mark Hickman and Yi-Chang Chiu	p. 86
Session E3: Crew Scheduling II (Monet Room B)		
<i>Session Chair: Raymond Kwan</i>		
13:30 – 13:55	Passengers' Satisfaction, Driver and Bus Scheduling: The Case of Lagos Metropolis Bus Rapid Transit (BRT) Scheme(MS-121) Kayode Oyesiku, Femi Oduduwa and Bambo Somuyiwa	p. 87
13:55 – 14:20	Case studies of TrainTRACS under contrasting train crew scheduling scenarios (MS-126) Ann Kwan and Raymond S.K. Kwan	p. 88

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22 July 2009 (Wednesday)		Abstract
14:20 – 14:45	Socially acceptable annual holiday planning for the crew of a local public transport company in Germany (MS-136) Sigrun Dewess	p. 89
Session E4: Heuristics II (Picasso Room B) <i>Session Chair: Agachai Sumalee</i>		
13:30 – 13:55	The Bus Bridging Problem in Metro Operations: Models and Algorithms (MS-43) Konstantinos L. Kepaptsoglou and Matthew G. Karlaftis	p. 90
13:55 – 14:20	A Branch-and-Price-and-Cut Framework For Crew Pairing Optimization (MS-85) Viktor Dück, Franz Wesselmann and Leena Suhl	p. 91
14:20 – 14:45	Column Generation with Dual Inequalities for Railway Crew Scheduling Problems (MS-134) Tatsushi Nishi, Yuki Muroi and Masahiro Inuiguchi	p. 92
14:45 – 15:15	Coffee Break Pre-Function Area	
Session F1: Suburban/ Rural Transit (Picasso Room A) <i>Session Chair: Rabi G. Mishalani</i>		
15:15 – 15:40	Public Transport for weak demand areas (MS-6) Timo Bertocchi and Uwe E. Köehler	p. 93
15:40 – 16:05	Arrival Time Prediction Model for Regional Bus Transit (MS-51) Andrew Chun Kit Wong, Amer Shalaby and Baher Abdulhai	p. 94
16:05 – 16:30	The rapid transit routing problem (MS-75) Angel Marin and Luis Cadarso	p. 95
Session F2: Pricing (Monet Room A) <i>Session Chair: Stefan Voss</i>		
15:15 – 15:40	Research on Pricing Theory and Method of Public Transport Basing on Cost-Benefit Analysis (MS-90) Xuemei Zhou, Xianzhun Zhang and Xiaoguang Yang	p. 96
15:40 – 16:05	Pareto-Improving Congestion Pricing on Multimodal Transportation Networks (MS-122) Di Wu, Yafeng Yin and Siriphong Lawphongpanich	p. 97
16:05 – 16:30	Road Pricing: Implications for Public Transport (MS-124) Theodore Tsekeris and Stefan Voss	p. 98
Session F3: Information Technology in Transport (Monet Room B) <i>Session Chair: Joachim R. Daduna</i>		
15:15 – 15:40	Pre-design method for advanced public transport systems (MS-21) Adriano Alessandrini, Francesco Filippi, Daniele Stam and Antonino Tripodi	p. 99
15:40 – 16:05	Log Analysis of Web Site for Railway Route Search (MS-74) Shintaro Terabe, Kosuke Jyuri and Hisao Uchiyama	p. 100
16:05 – 16:30	Dynamic Passenger Information: An International Comparison (MS-120) Joachim R. Daduna, Eric Schütze and Stefan Voss	p. 101

SESSION SCHEDULE 19**22 July 2009 (Wednesday)****Abstract**

Session F4: Heuristics III (Picasso Room B)		
<i>Session Chair: K.I. Wong</i>		
15:15 – 15:40	A new Algorithm for Scheduling Flex-Route Transit Services in a Constraint Programming Environment (MS-89) Baha W. Alshalalfah and Amer S. Shalaby	p. 102
15:40 – 16:05	Local search heuristics for the train timetabling problem (MS-103) Sebastian G. Klages and Kai Bollue	p. 103
16:05 – 16:30	Genetic and local search algorithms for train crew rostering (MS-127) Mantas Gudynas and Raymond S.K. Kwan	p. 104
Closing Ceremony		
<i>Picasso Room</i>		
16:30 – 17:00	Closing Address	