
Programme

Sunday 22 July

Jolly St Ermin’s Hotel
Caxton Street
London SW1H 0QW

Telephone 020 7222 7888

17.30 – 19.30 Registration

17.30 – 19.30 Welcome reception
Monday 23 July

Institution of Mechanical Engineers
1 Birdcage Walk
London SW1H 9JJ

Telephone 020 7222 7899

8.30 – 9.00 Registration

9.00 – 9.30 Welcome

Richard Allsop, Michael Bell, Benjamin Heydecker
Symposium Organisers

Welcome to London
David Bayliss OBE FREng
Chief Transport Planner for Greater London (1968 - 1984)

9.30 – 11.00 Session 1  Chair: Jean-Baptiste Lesort

1 A computable theory of dynamic congestion pricing
   Terry L Friesz, Changhyun Kwon, Reetabrata Mookherjee

2 Bounding the inefficiency of toll competition among congested roads
   Feng Xiao, Hai Yang, Xiaolei Guo

3 Time-differential pricing of road tolls and parking charges in a transport
   network with elastic demand
   Zhi-Chun Li, Hai-Jun Huang, William H K Lam, S C Wong

11.00 – 11.30 Coffee

11.30 – 13.00 Session 2  Chair: Carlos Daganzo

4 Dynamic ramp control strategies for risk averse system optimal assignment
   Takashi Akamatsu, Takashi Nagae

5 A robust approach to continuous network designs with demand uncertainty
   Yafeng Yin, Siriphong Lawphongpanich

6 Generalisation of the risk-averse traffic assignment
   W Y Szeto, Liam O'Brien, Margaret O'Mahony

13.00 – 14.00 Lunch
14.00 – 15.30 **Session 3**  **Proposed Chair: Alan Nicholson**

7  Empirical studies on road traffic response to capacity reduction  
   *Richard Clegg*

8  Variation of value of travel time savings over travel time in urban commuting: theoretical and empirical analysis  
   *Hironori Kato*

9  A game theoretical approach for modelling merging and yielding behaviour at freeway on-ramp sections  
   *Henry X Liu, Zain N Adam, Jeff X Ban*

15.30 – 16.00 **Tea**

16.00 – 17.30 **Session 4**  **Chair: Chan Wirasinghe**

10 Random supply and strategic behaviour in static traffic assignment  
   *Giuseppe Bellei, Guido Gentile*

11 Assessing network vulnerability of degradable transportation systems: an accessibility based approach  
   *Anthony Chen, Sirisak Kongsomsaksakul, Zhong Zou, Ming Lee, Will Recker*

12 Theoretical bounds of congestion-pricing efficiency for a continuum transportation system  
   *H W Ho, S C Wong, T D Hau*

19.00 **Reception**

   Terrace Pavilion  
   New Palace of Westminster  
   London  
   SW1A 0AA

   Please come to the St Stephen’s entrance
Tuesday 24 July

9.00 – 10.30  **Session 5  Chair: Piet Bovy**

13  Uniqueness of equilibrium in steady state and dynamic traffic networks  
    *Richard Mounce, Mike Smith*

14  Analysis of dynamic system optimum and externalities with departure time choice  
    *Andy H F Chow*

15  On path marginal cost analysis and its relation to dynamic system-optimal traffic assignment  
    *Wei Shen, Yu Nie, H Michael Zhang*

10.30 – 10.50  **Coffee**

10.50 – 12.20  **Session 6  Chair: Masao Kuwahara**

16  Commuting equilibria on a mass transit system with capacity constraints  
    *Qiong Tian, Hai-Jun Huang, Hai Yang*

17  Optimal single-route transit-vehicle scheduling  
    *Avishai Ceder*

18  A frequency based transit model for dynamic traffic assignment to multimodal networks  
    *Lorenzo Meschini, Guido Gentile, Natale Papola*

12.20 – 14.20  **Lunch**
14.20 – 15.50 **Session 7  Chair: Henk Van Zuylen**

19 A theory on modeling collaboration in logistics networks combining network design theory and transaction cost economics  
*Bas Groothedde, Piet Bovy*

20 On-line ambulance dispatching heuristics with the consideration of triage  
*K I Wong, Fumitaka Kurauchi, Michael G H Bell*

21 A Markov process model for capacity constrained transit assignment  
*Fitsum Teklu, David Watling, Richard Connors*

15.50 – 16.10 **Tea**

16.10 – 16.30 **Report of the International Advisory Committee**

16.30 – 18.00 **Session 8  Chair: Shinya Kikuchi**

22 A novel fuzzy logic controller for transit signal preemption  
*Yu-Chiun Chiou, Ming-Te Wang, Lawrence W Lan*

23 Reserve capacity of a signal-controlled network considering the effect of physical queueing  
*C K Wong, S C Wong, Hong K Lo*

24 Time dependent delay at unsignalized intersections  
*Werner Brilon*

19.30 **Conference dinner**

The Royal Society  
6-9 Carlton House Terrace  
London  
SW1Y 5AG

Telephone 020 7451 2500
**Wednesday 25 July**

9.00 – 10.30 **Session 9  Chair: Marian Tracz**

25 Properties of a microscopic heterogeneous multi-anticipative traffic flow model
_Serge P Hoogendoorn, Saskia Ossen, Marco Schreuder_

26 Anticipative vehicle control algorithm mitigating temporal information delay
_Yu Liu, Francois Dion_

27 A new concept and general algorithm architecture to improve automated incident detection
_Kun Zhang, Michael A P Taylor_

10.30 – 11.00 **Coffee**

11.00 – 12.30 **Session 10  Chair: Nathan Gartner**

28 Stochastic modeling and simulation of multi-lane traffic
_Niamph Dundon, Alexandros Sopasakis_

29 Freeway traffic oscillations and vehicle lane-change maneuvers
_Soyoung Ahn, Michael J Cassidy_

30 State dependence in lane changing models
_Charisma Choudhury, Moshe E Ben-Akiva, Tomer Toledo, Anita Rao, Gunwoo Lee_

12.30 – 13.30 **Lunch**
13.30 – 15.00 **Session 11** Chair: Valentin Silyanov

31 The Lagrangian coordinates and what it means for first order traffic flow models  
*Ludovic Leclercq, Jorge Laval, Estelle Chevallier*

32 Generic second order traffic flow modelling  
*Jean-Patrick Lebacque, Salim Mammar, Habib Haj Salem*

33 Understanding traffic breakdown: a stochastic approach  
*Reinhart Kühne, Reinhard Mahnke, Julia Hinkel*

15.00 – 15.30 **Tea**

15.30 – 17.00 **Session 12** Chair: Hani Mahmassani

34 Developing a positive approach to travel demand analysis: SILK theory and behavioral user equilibrium  
*Lei Zhang*

35 A new modeling framework for travelers' day-to-day route choice adjustment processes  
*Fan Yang, Henry X Liu*

36 The co-evolution of land use and road networks  
*David Levinson, Feng Xie, Shanjiang Zhu*

17.00 **Closure**

The International Advisory Committee will meet at lunch in the Stephenson Room of the IMechE, 12.20 – 14.20 on Tuesday 24 July.

BG Heydecker  
20 June 2007