WEDNESDAY 22 JUNE 2011		
1330-1400	REGISTRATION, *Lyric Circle Bar*	
1400-1410	OPENING REMARKS, *Room 1*	
1410-1450	KEYNOTE LECTURE, *Room 1 (chair Phil Scarf)* **Broadcasting sports, pay-tv or free-tv?** *Professor Stefan Késenne, University of Antwerp*	
1450-1520	REFRESHMENTS, *Lyric Circle Bar*	
1520-1720	PERFORMANCE & RANKING 1 *Room 1 (chair Lake Trask)*	ECONOMICS & FINANCE 1 *Room 2 (chair Ruud Koning)*
1520	**A ranking for the Vancouver 2010 winter Olympic games based on the Copeland method** *N.C.R. Bergiante & J.C.C.B. Soares de Mello*	**The managerial merry-go-round in English club football** *P. Dawson & S. Dobson*
1540	**Sports ranking and Twitter** *T. Chartier, A. Langville & L. Trask*	**Medium-term mortality of Dutch professional soccer players** *R.H. Koning & R. Amelink*
1600	**On team ranking in volleyball competitions using Google's page rank method** *O.V. Iftime & C. Stirbu*	**Medals and gross national income in the last four Olympic games (1996-2008)** *D. Palaiothodorou & G. Vagenas*
1620	**A new measure of competitive balance** *E. Noon*	**Allocating economic resources for Olympic sports in Brazil using a DEA-ZSG model** *T. Pereira dos Santos, L. Angulo-Meza & J.C.C.B. Soares de Mello*
1640	**Influence and prestige: rating Australian football league player performance through network analysis** *J. Sargent & A. Bedford*	**Sustainability of Tote betting markets in the presence of sophisticated play** *D. Edelman*
1700		**Instability of small scale professional sports leagues** *W. Höchtl & A. Konovalov*
1930-2100	BAR QUIZ, *Copthorne Hotel (Salford Quays)*	

THURSDAY 23 JUNE 2011		
0900-1020	**RULES & ADJUDICATION 1** *Room 1 (chair Gordon Hunter)*	**MODELLING & PREDICTION 1** *Room 2 (chair Yudai Honma)*
0900	**The unpredictable behaviour of the Jabulani ball – the new FIFA world cup football** *E. Chadwick, T. Rahulan & Y. Wang*	**Application of game theory in sport** *S. Banihashemi*
0920	**A stochastic analysis of some two-person sports** *D. Paindaveine & Y. Swan*	**Bivariate Skellam distributions with applications to soccer modelling and betting** *D. Karlis & I. Ntzoufras*
0940	**Generic handicapping for Paralympic sports** *D.F. Percy*	**The assumption of independence between the home and away goals in the simple Poisson goals model of football match outcomes** *A. Owen*
1000	**The interactive evolution of football codes: a tale of the rouge, Webb Ellis and the rubber bladder** *R. Stefani & R. Pollard*	**Forecasting national football league games: a birth process model of exact scores** *I. McHale*
1020-1050	REFRESHMENTS, *Lyric Circle Bar*	
1050-1210	**STRATEGY & OPTIMISATION 1** *Room 1 (chair Xin Shi)*	**PERFORMANCE & RANKING 2** *Room 2 (chair Ray Stefani)*
1050	**The importance of the high risk serve in badminton** *B. O'Bree, A. Bedford & A. Schembri*	**Weak rationality in football results: an analysis of the Guanabara cup using the Bowman and Colantoni method** *A.M. Alves, J.C.C.B. Soares de Mello, T.G. Ramos & A.P. Sant'Anna*
1110	**Optimum cadence** *P. Scarf & R. Reed*	**An analysis of footballers' passing behaviour based on random utility theory** *Y. Honma*
1130	**Optimal scoring rates in Twenty20 cricket** *P.S. Chami, B. Sing & D. Thomas*	**Quantification of competitive balance in European football: development of specially designed indices** *V. Manasis, V. Avgerinou, I. Ntzoufras & J.J. Reade*
1150	**A latent class model for batting strategy in test cricket** *X. Shi, P. Scarf & B. Fu*	**An open model for rating the performance of English premier league football players** *J. Oberstone*
1210-1250	**KEYNOTE LECTURE,** *Room 1 (chair Dave Percy)* **An investigation into three problems associated with limited overs cricket** *Professor Tim Swartz, Simon Fraser University*	
1250-1350	LUNCH, *Lyric Circle Bar*	

THURSDAY 23 JUNE 2011		
1350-1510	**TOURNAMENTS & SCHEDULING 1** *Room 1 (chair Anthony Bedford)*	MODELLING & PREDICTION 2 *Room 2 (chair Stephen Dobson)*
1350	**Scheduling an amateur indoor football league** *D.R. Goossens & F.C.R. Spieksma*	**Mathematical models that predict 2012 London Olympic games swimming and athletic performances** *I. Heazlewood & J. Walsh*
1410	**On the travel impact in men's tennis** *A. Bedford, E. Rusiti, M. Ladds & A. Schembri*	**Distance running performance and the 2-hour marathon: when, how and who?** *M. McCabe, J. Corbett & S. Glanville*
1430	**Measurement of competitive balance in conference and divisional tournament design** *L.J.A. Lenten*	**Limits to the running performances and physiological attributes of world class athletes** *R.H. Morton*
1450	**Minimum cost home-away assignment of double round-robin tournament** *T. Masuko & T. Matsui*	**Mathematical models that predict athletic performance in sprint and jump events for current and future world championships** *I. Heazlewood & J. Walsh*
1510-1540	REFRESHMENTS, *Lyric Circle Bar*	
1540-1700	**STRATEGY & OPTIMISATION 2** *Room 1 (chair Joel Oberstone)*	ECONOMICS & FINANCE 2 *Room 2 (chair Liam Lenten)*
1540	**Cooperative and non-cooperative playing styles in football: a game-theoretic model** *S. Dobson & J. Goddard*	**The 2012 Olympic announcement and participation in sport: a UK perspective** *P.M. Dawson*
1600	**Critical moments and the opportunity to score goals in world cup football** *J. Hammond*	**Auctions of players in IPL 14: an analysis of design, valuations and bids** *S. Das, I. Ray, J.J. Reade & P. Postl*
1620	**A one-dimensional random walk model for driving in touch football** *J. Walsh & I. Heazlewood*	**Ten top tips for sports betting** *R. Hill*
1640	**Bayesian network modelling of the determinants of physical activity levels** *D. Hoyle & N. Harding*	**Informational efficiency of an in-play betting market for English football match results** *S. Dobson & J. Goddard*
1815-1900 1900-2100	OPTIONAL M.U.F.C. STADIUM TOUR, *£7 per person* CONFERENCE DINNER, *Manchester United Football Club Stadium* **After dinner speaker** *Dr. John Haigh, University of Sussex*	

FRIDAY 24 JUNE 2011		
0900-1020	RULES & ADJUDICATION 2 *Room 1 (chair Ian McHale)*	MODELLING & PREDICTION 3 *Room 2 (chair Hugh Morton)*
0900	**A comparative study of biomechanics and its relation with performance level for gymnastic movements in teenagers** *A.R. Abdulghani & S.A. Rashid*	**Predicting results of a match-play golf tournament with Markov chains** *K.R. Gue, J. Smith & Ö. Özmen*
0920	**Using rain rules to forecast matches in limited overs cricket** *M. Asif & I.G. McHale*	**Predicting the outcome of the Ryder cup** *M. Maher*
0940	**Appropriate within-subjects mathematical models for the analysis of baroreflex sensitivity in human physiology** *G. Atkinson, A.M. Batterham, H. Jones, C.E. Taylor, C.K. Willie & Y.C. Tzeng*	**Using available player statistics to predict the outcome of singles and doubles tennis matches.** *D. Spanias & W.J. Knottenbelt*
1000	**Mathematical assessment of the flight characteristics of FIFA approved footballs** *D. Rogers, M. Passmore, S. Tuplin, A. Harland, T. Lucas & C. Holmes*	**Forecasting test cricket match outcomes in play** *S. Akhtar & P. Scarf*
1020-1050	REFRESHMENTS, *Lyric Circle Bar*	
1050-1210	STRATEGY & OPTIMISATION 3 *Room 1 (chair Dimitris Karlis)*	PERFORMANCE & RANKING 3 *Room 2 (chair Ray Hill)*
1050	**Comparing results of biomechanical analyses of raw data determined using AutoCAD and Matlab for a number of athletic performances** *A.R. Abdulghani*	**A relationship between data envelopment analysis and sabermetrics in an evaluation of baseball players** *N. Hirotsu*
1110	**Assessing athletic training progression with exposure variation analysis** *L. Passfield, K.C. Dietz, J.G. Hopker & S.A. Jobson*	**Rating players in test match cricket** *P. Scarf, S. Akhtar & Z. Rasool*
1130	**Participation in the AIS probiotics study 2010** *B. Buckley, D.B. Pyne, C. Barnes, N.P. West, A. Neumaier, P. Horn, S. Lahtinen & A.W. Cripps*	**A statistical analysis of English county cricket batting performances** *P. Thethi & G. Hunter*
1150	**Parameter selection in sport modelling: touch football** *J. Walsh & I. Heazlewood*	**Rating and ranking teams through spanning trees** *J.A. Trono*
1210-1250	KEYNOTE LECTURE, *Room 1 (chair James Reade)* **The use of mathematics in F1 racing** *Dr. Israel Vieira, Cardiff University*	
1250-1350	LUNCH, *Lyric Circle Bar*	

FRIDAY 24 JUNE 2011		
1350-1450	**STRATEGY & OPTIMISATION 4** *Room 1 (chair Bob Buckley)*	**TOURNAMENTS & SCHEDULING 2** *Room 2 (chair João Soares de Mello)*
1350	**A sequential logistic regression approach for analysing strategy in the sprint race in track cycling** *J. Moffatt, P. Scarf, L. Passfield, I. McHale & K. Zhang*	**Competitive choice dimensions of golf destinations: a perceptual mapping approach** *C.M.F. Monteiro & J.P.C.S. Jorge*
1410	**Pace and critical gradient for hill runners** *A. Kay*	**Designing fair 8-team and 16-team tournament brackets** *M. Prince, C. Smith & J. Geunes*
1430	**Incentive versus expectation in NBA basketball** *A.J. Schembri, A. Bedford, J.H. Park & B. O'Bree*	**Scheduling the Brazilian soccer league regarding two strength groups** *M.C. Roboredo, L. Aizemberg, J.C.C.B. Soares de Mello & A.A. Pessoa*
1450-1520	REFRESHMENTS, *Lyric Circle Bar*	
1520-1620	PERFORMANCE & RANKING 4 *Room 1 (chair John Trono)*	ECONOMICS & FINANCE 3 *Room 2 (chair Nobuyoshi Hirotsu)*
1520	**Data envelopment analysis of formula one constructors' championship** *E. Gutiérrez & S. Lozano*	**Kelly's fractional staking in the twenty-first century** *E. Noon, W.J. Knottenbelt & D. Kuhn*
1540	**The influence of the Olympic games on athletic performance** *L. Foster, D. James & S. Haake*	**Exchange versus dealers: a high-frequency analysis of in-play betting prices** *J.J. Reade*
1600	**Measuring the NBA teams' cross-efficiency by DEA** *L. Aizemberg, M.C. Roboredo, T.G. Ramos, A.M. Alves, L.Â. Meza & J.C.C.B. Soares de Mello*	**An environment for the specification and evaluation of betting strategies** *P. Tsirimpas & W.J. Knottenbelt*
1620-1630	CLOSING REMARKS, *Room 1*	
1800-2100	CONFERENCE CRICKET MATCH, *Tatton Park (Cheshire)* Economists C.C. v. Delegates XI	