MathSport International

Conference Schedule

	MONDAY 29 JUNE 2015	
0900–0930	REGISTRATION AND REFRESHMENTS, *Stewart Mason Building foyer*	
0930–0940	OPENING REMARKS, *SMB014*	
0940–1030	KEYNOTE LECTURE, *SMB014* (chair Ray Stefani) **Modeling uncertainty in finance and sport** Mr David Kendix, Actuary and cricket statistician	
1030–1100	REFRESHMENTS, *James France exhibition area*	
1100–1220	PREDICTION *SMB014* (chair Frits Spieksma)	STRATEGY *SMB017* (chair David Percy)
1100	**Predictive Modelling of Match Results in the t20 Big Bash League** Aaron Corris and Anthony Bedford	**Investing in Three Point Shooting: A Strategic Portfolio Management Approach** Mark Fichman and John O'Brien
1120	**Player Projection in Belgian Basketball** Joris Renkens, Yuri Passchyn and Jesse Davis	**How to Win a Beach Volleyball Match Using Multi-Scale Markov Decision Processes** Susanne Boerner
1140	**Predicting the Final League Tables of Domestic Football Leagues** Jan Van Haaren and Jesse Davis	**An Integer Programming Model to provide Optimal Line-up for Master Swimming Relay** Simona Mancini
1200	**Statistical Modelling and Forecasting Association Football Results** Jose Sellitti Rangel Junior	
1220–1330	LUNCH, *James France exhibition area*	

MONDAY 29 JUNE 2015

1330–1450	PERFORMANCE ANALYSIS *SMB014 (chair Alun Owen)*	DATA COLLECTION TECHNOLOGY *SMB017 (chair Ben Halkon)*
1330	**Home Advantage in Individual Contest Tournaments** Liam Lenten and James Reade	**Assistive Sports Video Annotation: Modelling and Detecting Complex Events in Sports Video** David Marshall, Aled Owen, Matthew Trott, Kirill Sidorov, Yulia Hicks and Rhodri Bown
1350	**The Age Advantage in Association Football** Steve Lawrence *together with . . .*	**A supervised PCA logistic regression model for predicting fatigue-related injuries using training GPS data** Stylianos Kampakis, Ioannis Kosmidis, Ed Leng and Wayne Diesel
1410	**The Ageing Game** Simon Gleave and Mark Taylor	**A Low-cost Spatiotemporal Data Collection System for Tennis** Silvia Vinyes Mora, George Barnett, Casper O. da Costa-Luis, Jose Garcia Maegli, Martin Ingram, James Neale and William J. Knottenbelt
1430	**So the last will be the first** Ruud Koning and Manon Grevinga*	**An overview of in-depth performance analysis for wheelchair rugby with the Australian Steelers** Jason Hunt, Nick Sanders, Anthony Bedford and Stuart Morgan
1450–1520	REFRESHMENTS, *James France exhibition area*	
1520–1640	SCHEDULING *SMB014 (chair Chris Potts)*	RANKING *SMB017 (chair Roland Minton)*
1520	**Parallel Scheduling of Several Non-Commercial Sport Leagues** Jörn Schönberger	**Who is the greatest? A Bayesian analysis of one-day international cricketers** Pete Philipson and Richard Boys
1540	**Diverse Formats of Professional Sports Leagues** Kimmo Nurmi, Jari Kyngäs and Nico Kyngäs	**Adapting the elo rating system for multi-competitor sports** Pim Ritmeijer
1600	**Timetabling a cricket league over a 9-year period** Mike Wright	**Sports Ranking Systems Efficiency Comparison** George Kyriakides, Kyriacos Talattinis and George Stephanides
1620	**What draws Belgian football fans to the game? Evidence from an online survey** Chang Wang, Dries Goossens and Martina Vandebroek	**Analysis of the 2014 Formula 1 Constructors Championship using a modified Condorcet Method** João Carlos Soares de Mello, Catarina Mourão, Lidia Angulo Meza and Silvio Gomes Júnior
1700–1830	TOUR OF CAMPUS SPORTS AND SPORT RESEARCH FACILITIES *from SMB foyer*	
2100–2300	PUB QUIZ, *The Swan in the Rushes, Loughborough, LE11 5BE*	

TUESDAY 30 JUNE 2015

0840–0910	REFRESHMENTS, *James France exhibition area*

0910–1000	KEYNOTE LECTURE, *SMB014 (chair Frits Spieksma)*
	Construction methods for sports league schedules
	Professor Sigrid Knust, University of Osnabrück

1000–1100	PREDICTION	PERFORMANCE ANALYSIS
	SMB014 (chair Ioannis Ntzoufras)	*SMB017 (chair Tim Swartz)*
1000	**Comparative performance of models to forecast match wins in professional tennis: Is there a GOAT for tennis prediction?** Stephanie Kovalchik	**The Relative Competitive Balance of Male and Female Teams in World Championship Competition and the Relative Predictability of Official International Sports Rating Systems** Ray Stefani
1020	**Using tennis rankings to predict performance in upcoming tournaments** Gerard Kuper, Gerard Sierksma and Frits Spieksma	**Batting at Three in Five-Day Cricket: a Descriptive Analysis** Jonathan Sargent
1040	**Predicting the Results of Tennis and Volleyball Matches Using Regression Models, and Applications to Gambling Strategies.** Edyta Dziedzic and Gordon Hunter	**Graph Centrality Analysis for the Evaluation of the 2014 Guanabara Cup** Luana C. Brandão, Renata R. Del-Vecchio and João Carlos C.B. Soares de Mello

1100–1130	REFRESHMENTS, *James France exhibition area*

1130–1230	FITNESS & TRAINING	MODELLING & SIMULATION
	SMB014 (chair Ray Stefani)	*SMB017 (chair Gordon Hunter)*
1130	**A new algorithmic methodology for assessing, and potentially predicting, racing cyclists' fitness from large training data sets** Andreas Petrides, Anthony J. Purnell and Glenn Vinnicombe	**A competing risks model for the time to the first goal** Petr Volf
1150	**Modelling the training process in cycling** Naif Alotaibi and Philip Scarf	**Analysis of soccer data using COM-Poisson regression models** Charalampos Chanialidis, Nial Friel, Dimitris Karlis and Ioannis Ntzoufras
1210	**Linking the performance of endurance runners to training and physiological effects** Ioannis Kosmidis and Louis Passfield	**Robust modelling for soccer** Dimitris Karlis

1230–1340	LUNCH, *James France exhibition area*

TUESDAY 30 JUNE 2015

1340–1500	SPORTS ECONOMICS *SMB014 (chair Mark Fichman)*	PERFORMANCE AND DATA ANALYSIS *SMB017 (chair Michael Wright)*
1340	**Economic Impact of Organizing Large-Scale Sports Events** Elmer Sterken	**ODI Cricket: Analyzing Bowler Performance Using Stochastic Dominance Rules** Uday Damodaran
1400	**Measuring Competitive Balance and Uncertainty of Outcome Hypothesis in European Football** Vasileios Manasis, Ioannis Ntzoufras and J.James Reade	**Analysis of referee differences in netball: a look at the ANZ Championship** Jason Hunt and Anthony Bedford
1420	**Smart ticket pricing in qualifying sports championships: an adaptive ticket sales to maximize fans satisfaction with higher net incomes** Rosiane de Freitas	**Introduction to the Infostrada Sports database** Simon Gleave
1440	**The Costing and pricing of sports events** Stefan Kesenne	**The Development and Assessment of an Automated Biomechanical Analysis Approach in Rowing** Philip Harfield, Ben Halkon and Iain Phillips
1500–1530	REFRESHMENTS, *James France exhibition area*	
1530–1620	KEYNOTE LECTURE, *SMB014 (chair Ben Halkon)* **Model + Measurement = Medals, but in a non-deterministic way** Professor Tony Purnell, Head of Technology, British Cycling	
1620–1720	RULES AND FAIRNESS *SMB014 (chair Anthony Bedford)*	ANALYSIS OF PLAY *SMB017 (chair João Soares de Mello)*
1620	**Effects of Rules Changes in NHL** Patrice Marek	**Quantifying Team and League Quality in Soccer via an Expected Goal Value Model** Patrick Lucey
1640	**A new Net Resource Factor based alternative method to calculate revised target in interrupted One Day Cricket Matches** Sanjeet Singh and Arnab Adhikari	**Measuring Efficiency of a Set of Players of a Soccer Team and Differentiating Players Performances by their Reference Frequency** Nobuyoshi Hirotsu and Tohru Ueda
1700	**Rethinking the FIFA World Cup final draw** Julien Guyon	**Modelling Predictability and Criticality in Penalty Shootout Competitions** Alun Owen and Lucas Dias-Condexia
1900–2230	CONFERENCE DINNER, *Trent Bridge cricket ground* *Coaches depart from Burleigh Court at 1800*	

WEDNESDAY 1 JULY 2015

0840–0910	REFRESHMENTS, *James France exhibition area*		
0910–1030	SCHEDULING *SMB014 (chair Dries Goossens)*	BETTING *SMB017 (chair Elmer Sterken)*	
0910	**A combined approach for approximating the Traveling Tournament Problem and the Traveling Umpire Problem** Stephan Westphal and Marco Bender	**Optimise Market Margins using a Conditional Value-at-Risk Model in Association Football** Simon Spoorendonk and Simon Kristiansen	
0930	**The schedule of the South American Qualifiers of the 2018 Football World Cup has no breaks in double rounds** Mario Guajardo, Guillermo Durán and Denis Sauré	**Unbiased wheel arrangements and combination betting in roulette** David Percy	
0950	**Mathematical Models for an NBA-type Scheduling Format in the Argentinas National Basketball League** Guillermo Duran, Santiago Duran, Javier Marenco, Federico Mascialino and Pablo Rey	**Can betting in PGA golf be profitable? An analysis of common wagering techniques applied to outright winner market prices** Bradley O'Bree and Anthony Bedford	
1010	**Scheduling Rugby in New Zealand** Mark Johnston	**A safe bet – or is it?** Dominic Cortis	
1030–1100	REFRESHMENTS, *James France exhibition area*		
1100–1220	MODELLING & SIMULATION *SMB014 (chair Uday Damodaran)*	PERFORMANCE ANALYSIS *SMB017 (chair Roger Brooks)*	INFOSTRADA WORKSHOP *GGB01*
1100	**Problems in Twenty20 Cricket Addressed via Simulation** Tim Swartz	**Assessing the effect of player ability on scoring performance for holes of different par score in PGA golf** Bradley O'Bree, James Baglin and Anthony Bedford	**The Podium data tool** Simon Gleave
1120	**Probabilistic Modelling of Twenty-Twenty Cricket : An Investigation into Various Metrics of Player Performance and their Effects on the Resulting Match and Player Scores** Dilaksha Attanayake and Gordon Hunter	**ShotLink and Consistency in Golf** Roland Minton	
1140	**Skill importance across ages for men's Volleyball** Sotirios Drikos and Ioannis Ntzoufras	**Identifying Cricket Bat-Ball Impact Characteristics: a Curve Fitting Technique** Chris Peploe, Stuart McErlain-Naylor and Mark King	
1200	**On the expected duration of a tennis set** Marco Ferrante, Giovanni Fonseca, Maria Maistro and Davide Trevisiol	**Margin for Error: Snooker Shot Analysis** James Orwell, Richard Allan and Gordon Hunter	
1220–1330	LUNCH, *James France exhibition area*		

WEDNESDAY 1 JULY 2015

1330–1430	BIOMECHANICS & TRAINING *SMB014 (chair Phil Scarf)*	PREDICTION *SMB017 (chair Anthony Kay)*
1330	**Optimal Experimental Design for Parameter Estimation of Training-Performance Models** Johannes Herold, Sebastian F. Walter, Stefan Körkel and Markus Buchner	**Mathematical Models that Describe and Predict Performance Change in Men's and Women's Athletic Events: 1960–2014** Ian Heazlewood and Joe Walsh
1350	**A three dimensional description of the hamstrings-quadriceps ratio from a minimal data set** Dimitrios Voukelatos and Matthew Pain	**Mathematical Models Predicting Performance in Track and Field at the 2011, 2013 and 2015 IAAF World Championships** Ian Heazlewood and Joe Walsh
1410		**Dynamic forecasting model based on ranking system for hockey match** Blanka Šedivá
1430–1500	REFRESHMENTS, *James France exhibition area*	
1500–1550	KEYNOTE LECTURE, *SMB014 (chair Philip Scarf)* **Statistics at big sports events** Dr Ian McHale, University of Manchester	
1550–1600	CLOSING REMARKS, *SMB014*	

Presenter is indicated with * if he/she is not the first author of a paper.