



International Society of Performance Analysis of Sport (UK)
ISPAS: <http://ispas.org/>

8TH INTERNATIONAL WORKSHOP AND CONFERENCE OF THE INTERNATIONAL SOCIETY OF PERFORMANCE ANALYSIS OF SPORT

11th-13th of September 2019 (Budapest, Hungary)

„Technology meets Practice and Science”

Final Program

(09.09.2019)

Venue: Hotel Benczur (Budapest)

11th of September (Wednesday)

18.00 – 20.00 Registration open

19.30 - 21.00 Welcome wine and snack party of the Rector of Eotvos Lorand University
(in Hotel Benczur)
(For invited keynote speakers, exhibitors, sponsors & all international attendees)

12th of September (Thursday)

Chair: M. Hughes

- 9.30 **Opening Speeches**
H. Dancs (University of ELTE, Hungary)
N. James (University of Middlesex, Chair of ISPAS, UK)
M. Hughes (President of ISPAS)
K. Felvinczi (ELTE PPK, Vice-Dean)
- 9.45 **Performance Analysis in the coaching process in elite – Keynote presentation**
N. James (University of Middlesex, Chair of ISPAS, UK)
- 10.15 **How to collect, to analyse and to provide feedback to athletes by using technology? – Keynote presentation**
M. T. Hughes (Insight, UK)
- 10.45 **How to choose performance indicators in different sports? – Keynote presentation**
N. Parmar (University of Middlesex-UK)

11.05 **Company Keynote presentation:**

TMG – KONSENS (Boris Siraiy)

11.25 - 11.45 **Networking Break**

11.45 **Delivery of performance analysis in elite, underage rugby union: how to optimise player development?**

D. McGrath (School of Public Health, Physiotherapy and Sports Science, University College Dublin, Ireland, Irish Rugby Football Union, Ireland)

11.55 **Predicting cycling power using linear regression**

G. Vandewiele (Ghent University, Belgium)

12.05 **In it to win it: Measuring stress responses in horse and riders during eventing Competition**

H. Cameron-Whytock (Nottingham Trent University, UK)

12.15 **Clustering women's world sevens rugby by temporal attack-defence performance**

K. Sasaki (Res. Ctr. Health, Physical Fitness and Sport, Nagoya University, Nagoya, Japan)

12.25 **Company Keynote presentation:**

PERFORMANCEINNOVATION/FOCUS

12.45 - 13.30 **Lunch/Snack /Coffee Break**

13.30 - 15.00 **PERFORMANCE ANALYSIS INVASION TEAM AND NET GAMES: Thematic Workshop session**

Chair: N. James

13.30 – 14.00 **Invited speakers presentations (each 15 mins) about practical aspects of PA**

T. Sterbenz (Vice-rector of University of PE, Hungary)

K. Világi (University of PE, Hungary)

C. White (British Tennis, UK)

14.00 **Optimization techniques for basketball players under the convex risk measures**

L. Ntasis (University of Peloponnese, Tripoli Greece)

- 14.10** **Design and validation of an observational system in Beach Volleyball**
D. Sousa (University of Madeira, Portugal)
- 14.20** **Differential vs conventional resistance training effects in youth basketball players**
S. Pour Eghbali (Otto-von-Guericke-Universität Magdeburg, Magdeburg, Germany)
- 14.30** **How playing basketball with distinct body height and biological maturation affects physical performance and tactical behavior?**
S. Pour Eghbali (Otto-von-Guericke-Universität Magdeburg, Magdeburg, Germany)
- 14.40** **Contribution to methodology of efficiency evaluation of handball goalkeepers**
J. Cvenić (Faculty of Education, J.J. Strossmayer University of Osijek, Osijek, Croatia)

14.50- 15.10 **Networking Break**

15.10 - 16.45 **PERFORMANCE ANALYSIS IN ELITE SOCCER: Thematic Workshop Session**

Chair: G. Sporis

- 15.10 – 16.00** **Invited speakers presentations (each 15 mins) about practical aspects of PA:**
A. Fuller (Hudl)

Working as an applied analyst in soccer supporting the coaching process and governing bodies.

A. Ackerman (Insight, UK)
Søren Bjerg (FC Midtjylland)

- 16.00** **The process performance analysts follow when using video feedback in professional Semi Elite English Soccer**
C. Mulvenna (University of Chester, UK)

- 16.10** **The influence of situational variables on attacking process in football**
J. Kim (University of Middlesex, London, UK)

- 16.20** **Spatial-temporal metrics to assess collective behaviour in football: a systematic review**
M. Corsie, N. Buchanan, T. Craig and P. Swinton,
School of Health Sciences, Robert Gordon University, Garthdee Road, Aberdeen, UK.

- 16.30** **Practical aspects of the job of an analyst at a soccer team**
P. Alexandre (FC, Valencia) - Invited speaker

16.45 - 17.00 **Networking break**

Chair: N. Parmar

KEYNOTE PRESENTATIONS:

- 17.00** **Improving elite sports performance in a data driven world**
M. T. Hughes (Insight, UK)
- 17.30** **Performance Profiling in Sport: Bridging the theory-practice gap**
N. James (Chair of ISPAS - University of Middlesex, UK)
- 18.00** **Sport Analytics as a tool for effective decision-making**
T. Sterbenz (Vice-rector of University of Physical Education, Hungary)
K. Világi (University of Physical Education, Hungary)
- 18.30** **Future of Performance Analysis in Sport” and „Role of the Performance Analyst in the coaching Team” – Chat Panel Discussion**
Moderator: N. James
C. White (Lawn Tennis Association, UK),
A. Ackerman (Insight, UK),
P. Perez (FC Valencia, Spain)
- 19.10 - 19.30** **Introduction of the new book: “Essential of Performance Analysis in Sport - 3rd edition”.**
M.D. Hughes (UK)

20.30 - 22.00 **Dinner for invited keynote speakers and sponsors, exhibitors (in Hotel Benczur)**

13th of September (Friday)

Chair: N. Parmar

- 9.00** **Cycling performance in comparison with cycling test in the laboratory and uphill cycling test.**
R. Samo (Faculty of sport, University of Ljubljana, Ljubljana, Slovenia)
- 9.10** **Video based notational analysis of the game structure in collegiate men’s lacrosse**
R. Hauer (University of Vienna, Austria).

KEYNOTE PRESENTATIONS:

- 9.20** **Key Performance Indicator in Elite Tennis**
C. White (Law Tennis Association, UK)
- 9.50** **Aligning multiple data sets to generate greater insights**
A. Ackerman (Insight, UK)
- 10.20** **ISPAS – Accreditation**
M. T. Hughes (Insight- ISPAS, UK)

10.40 **Opposition intelligence strategies to support the success of the England teams**
A. Fuller FA, UK (Hudl, UK)

11.10 – 11.25 **Sport science support in a national team setting in soccer: added value and challenges**
G. Schuth (Head of Sport Science & Strength and Conditioning Male National Teams)

11.25 - 11.50 **Networking Break**

11.50 **Cooperation of Performance Analysts and Data Analysts and Tech companies” – Chat Panel Discussion**
Moderator: M. T. Hughes
J. Coulson (Catapult)
A. Fairbanks (Regional Director Northern Europe, Hudl)
B. Siraly (TMG)

12.20 **Using IT (video) technology at match analyses – Keynote presentation**
P. Aleixandre (FC Valencia, Spain)

12.50 **Company Keynote Presentation:**

HUDL

13.20 – 14.00 **Lunch/Snack and Coffee Break**

Chair: K. Világi

KEYNOTE PRESENTATIONS:

14.00 **Company Keynote Presentation:**

CATAPULTSPORTS

14.20 **‘Atomic’ Handball: Facts & Myths**
I. Gruic (Faculty of Kineziology, Zagreb, Croatia)

14.50 **Dinamo Football Academy - " Preparedness is the key to success and victory"-**
T. Despot (Dinamo Football Academy, Zagreb, Croatia)

15.20 **Performance analysis and Sport Diagnostics in Football: The case study Luka Modric**
V. Vučetić (Strenght coach of Luka Modric, Croatia)

15.50 **Performance analysis of the first team of Dinamo Zagreb**
D. Antonic (Performance Analyst Dinamo Zagreb, Croatia)

16.20 **Future of Performance Diagnostic in Football**
G. Sporis (Faculty of Kineziology, Zagreb, Croatia)

16.40 - 17.15 **Networking Break**

Chair: N. James

- 17.15** **High-performance Canadian coaches' attitudes and behaviours regarding technology implementation into their coaching practice**
Jaswal, R.¹, Stergiou, P.², & Katz, L.¹
¹Kinesiology, University of Calgary, Calgary, Canada, ²Canadian Sport Institute Calgary, Calgary, Canada.
- 17.25** **Parabolic running path of elite sprinters on curve of 400 metres track and independent angles of lanes : a referenced based cause-effect relationship**
K. K. Debnath (Degree College of Physical Education- Autonomous College, Shri. H.V.P. Mandal, Amravati, Maharashtra, India.)
- 17.35** **Predictive Performance Analysis of Players Against Training Plan**
S. P. Deshpande (P. G. Department of Computer Science and Technology, Degree College of Physical Education, Autonomous College, Amravati, Maharashtra, India)
- 17.45** **Weight training-induced testosterone responses of male vegans vs meat eaters: A pilot study**
C.G. Juan (Department of Exercise Science, College of Human Kinetics, University of the Philippines, Diliman, Quezon City, Philippines)

18.00

E-Posters

with 2 minutes summary presentations

Chair: G. Sporis

Descriptors and definitions for the rugby league tackle (RUGBY)

Hopkinson, M¹., Bissas, A¹., Nicholson, G¹., Beggs, C¹., Scantlebury, S¹., Hendricks, S^{1,2}, Jones, B^{1,2,3,4,5,6}.

¹ Carnegie Applied Rugby Research (CARR) centre, Institute for Sport, Physical Activity and Leisure, Leeds Beckett University, UK

² Division of Exercise Science and Sports Medicine, Department of Human Biology, Faculty of Health Sciences, the University of Cape Town and the Sports Science Institute of South Africa, Cape Town, South Africa.

The relationship between the maximum isometric strength and the speed of the ball in the power serve in Beach Volleyball (BEACVOLLEYBALL)

Pérez-Turpin, J.A.¹, Terol-Sanchis, M. ¹, Gomis-Gomis, M.J. ¹, Elvira, C¹.

¹General Didactics Department, Faculty of Education, University of Alicante, San Vicente del Raspeig, Spain

Everesting challenge attempt strategy: a case study (CYCLING)

L. Cesanelli¹, G. Vici¹, D. Camilletti¹, R. Ceci¹, L. Belli¹, V. Polzonetti¹

¹School of Biosciences and Veterinary Medicine – University of Camerino

The Evaluation of the High Peak of Velocity in footballers. Survey of all category from an Amateur Youth Academy (FOOTBALL)

Bernardo Ricioppo¹, Ciro Hosseini Varde'i¹ and Riccardo Izzo¹

¹Department of Biomolecular Sciences, School of Sport Science, Exercise and Health, University of Urbino Carlo Bo, Urbino, Pesaro e Urbino 61029, Italy

Analysis of the Physical efficiency index of football Teams and correlation with goal events. An Survey of the Italian Serie A Championship (FOOTBALL)

Lorenzo Canapini¹, Ciro Hosseini Varde'i¹ and Riccardo Izzo¹

¹Department of Biomolecular Sciences, School of Sport Science, Exercise and Health, University of Urbino Carlo Bo, Urbino, Pesaro e Urbino 61029, Italy

Differences in technical-tactical indicators of karate kumite between the world championship in Tokyo 2008 and Madrid 2018 (KARATE)

Tihomir Vidranski, Petar Otkovic and Daria Zupan Tadijanov,

Department of Kinesiology, Faculty of Education, University of Josip Juraj Strossmayer, Osijek, Croatia

Differences in biological age of the best U11 and U13 teams in Croatia (SOCCER)

Ajman Hrvoje¹ and Tomac Zvonimir²,

¹Faculty of Education, University Josip Juraj Strossmayer, Osijek, Croatia.

Impact of 24 weeks of strength training coupled to endurance training on endurance performance (HERO Dolomites 2019) (CYCLING)

L. Cesanelli¹, G. Vici¹, D. Camilletti¹, R. Ceci¹, L. Belli¹, V. Polzonetti¹

¹School of Biosciences and Veterinary Medicine – University of Camerino

Electrical activity of the brain during fine motor activity – case study.

Damir Bavcevic¹, Tonci Bavcevic¹ and Bojan Masanovic²

¹University of Split, Faculty of Kinesiology, Split, Croatia

²University of Montenegro, Faculty for Sport and Physical Education, Niksic, Montenegro

The analysis of 12-year old children's self-assessment of swimming ability. (SWIMMING)

Rastovski, D.¹, Lovrinčević, J.¹ and Ajman, H.¹

¹Faculty of Education, J.J. Strossmayer University of Osijek, Croatia

Biomechanics of the clean and jerkin weight lifting national Jordanian team (WEIGHTLIFTING)

Amer I. Al-Khleifat¹ Maher Al-Kilani², Hashem A. Kilani³, Ziad Irmily

School of Physical Education, University of Jordan, Amman, Jordan ^{1,3}

Hashemite University, Zarqa, Jordan²

Uptake and influence on time penalties of competitor worn stopwatches during a trial period in grassroots level Eventing.

Lauren Birkbeck¹ and Georgina Ridal²,

¹Animal Behaviour, Performance and Welfare Group, School of Animal, Rural and Environmental Sciences, Nottingham Trent University, United Kingdom.

²National Horseracing College, Doncaster, United Kingdom

Teaching the service to novice athletes.

Dante Forte¹, and Gaetano Altavilla²,

¹University of Salerno, Salerno, Italy.

²University of Split, Split, Croatia.

Network Metrics to Assess Collective Behaviour in Football: A Systematic Review (SOCCER)

Martin Corsie, Neil Buchanan, Thomas Craig and Paul Swinton,

School of Health Sciences, Robert Gordon University, Garthdee Road, Aberdeen, UK.

Examination of agility factors of junior football players in Topola, Serbia (SOCCER)

M. Koltai, A. Gusztafik

Eötvös Loránd University (ELTE), Faculty of Education and Psychology (PPK), the Institute of Sport Sciences, Szombathely

The analysis of endurance variables among young soccer players. (SOCCER)

Á. Gusztafik, M. Koltai

Illés Academy, Szombathely, Hungary. Nottingham Trent University, United Kingdom.

The effectiveness of the Handball defense and goalkeeper against organized attack (HANDBALL)

D. Sousa (University of Madeira, Portugal)

Practical application of Big Data - Multidimensional analytical methods in sports (BIG DATA IN SPORT)

Mátyás Tamás Sonkoly, József Csicsman (foreign consultant)

Department of Computational Optimization, University of Szeged, Szeged, Hungary

Új Calculus Számítógép-alkalmazási Bt., Budapest, Hungary

Training load effect on hamstring passive stiffness.

D. Satkunskiene¹, T.M. Silva², S. Kamandulis¹, N.M.C. Leite³, A. Domeika⁴, M. Mickevicius¹, A. Snieckus¹

¹ *Institute of Sports Science and Innovation, Lithuanian Sports University, Kaunas, Lithuania;*

² *University of Trás-os-Montes and Alto Douro, Vila Real, Portugal;*

³ *Research Center in Sports Sciences, Health Sciences and Human Development, CIDESD, University of Trás-os-Montes and Alto Douro, Vila Real, Portugal;*

⁴ *Kaunas University of Technology, Kaunas, Lithuania.*

Chair: M. Hughes

19.00 **Routledge: Young Researchers Award**
N. Parmar (University of Middlesex, London UK)

19.15 **Introduction: 2020 World Congress of Performance Analysis of Sport XIII. Vienna**
R. Hauer (University of Vienna, Austria)

19.20 -19.30 **Conference closing**
H. Dancs (Eotvos Lorand University, Budapest, Hungary)
N. James (Chair of ISPAS)

20.30 - 22.00 **Dinner for invited keynote speakers and sponsors, exhibitors**