



FULL PROGRAMME

27.06.2011 09:00

Secretariat Opening; Access to Exhibition

27.06.2011 14:30

Bus Shuttle from Hotels

27.06.2011 15:30

Room 1



Workshop: BEST PRACTICES FOR RECORDING THE SEMG SIGNAL

Chairperson: Carlo de Luca

27.06.2011 17:00

Auditorium

Opening Ceremony

Portuguese Guitar Performance (Porto Music School)

27.06.2011 18:00

Auditorium

Opening Conference 1

The Geoffrey Dyson Lecture:

Youlian Hong

TAI CHI: MOVEMENT CHARACTERISTICS AND PREVENTION OF FALLS

Chairperson: Manfred Vieten

27.06.2011 19:00

Exhibition Hall

Technical Exhibition Opening & Port of Honour

Hip Hop Performance "Next Level"

27.06.2011 20:00

Bus Shuttle to Hotels

28.06.2011 08:30

Bus Shuttle from Hotels

28.06.2011 09:00

Auditorium

Conference 2

G.-P. Brueggemann

BIOLOGICAL TISSUE RESPONSE TO MECHANICAL LOADING IN IMPACT SPORTS

Chairperson: J. Paulo Vilas-Boas

28.06.2011 10:00

Auditorium

Oral Session 1 (Biomechanics of Individual Sports - Swimming)

Chairperson: Raúl Arellano

ID403

COMPARING COMPUTATIONAL FLUID DYNAMICS AND INVERSE DYNAMICS
METHODOLOGIES TO ASSESS PASSIVE DRAG DURING SWIMMING GLIDING

Lígia Costa, João Ribeiro, Daniel Marinho, Vishveswar Mantha, João Paulo Vilas-Boas,
Ricardo J. Fernandes, António Silva, Abel Rouboa, Leandro Machado

ID184

THE EFFECT OF WEARING A CAP ON THE SWIMMER PASSIVE DRAG

Daniel A. Marinho, Vishveswar R. Mantha, Abel I. Rouboa, João P. Vilas-Boas, Leandro
Machado, Tiago M. Barbosa, António J. Silva

ID401

LOWER LIMBS JOINTS MOTION DURING SUBMAXIMAL 100-M BUTTERFLY

Kelly de Jesus, Karla de Jesus, Pedro Figueiredo, Pedro Gonçalves, João Paulo Vilas-Boas,
Ricardo J. Fernandes

ID512 (NIA)

TETHERED SWIMMING AS AN USEFUL TOOL TO MEASURE UNBALANCE BETWEEN ARMS AND
FORCE PRODUCTION DECREASE

Pedro G. Morouço, Daniel A. Marinho, Ricardo J. Fernandes, Mário C. Marques

ID581 (NIA)

BIOMECHANICAL ANALYSIS OF STARTING PREFERENCE FOR EXPERT SWIMMERS

Julien Vantorre, Ludovic Seifert, J. Paulo Vilas-Boas, Ricardo Fernandes, Benoit Bideau,
Guillaume Nicolas, Didier Chollet

ID407

ARE LAND TESTS A GOOD PREDICTOR OF SWIM START PERFORMANCE?

Jodi Cossor, Sian Slawson, Barry Shillabeer, Paul Conway, Andrew West

28.06.2011 10:00

Room 1

Oral Session 2 (Miscellaneous)

Chairperson: Hans-Joachim Menzel

ID383

KINETIC ANALYSIS OF TOE-ON TKACHEV ON UNEVEN BARS

David G. Kerwin, Gareth Irwin

ID521

EFFECT OF HAND PLACEMENT POSITION ON PRESS-TO-HANDSTAND TECHNIQUES AND STABILITY

Pui Wah Kong, Sin Yung Leung, Yoon Soo Han

ID534

VERTICAL IMPACT FORCE AND LOADING RATE ON THE GYM
NASTICS TABLE VAULT

Gabriella Penitente, William A. Sands, Jeni R. McNeal

ID425 (NIA)

COMPARISON OF LUGERS' START ELEMENTS ON A SLIDING TRACK AND AN ICED START RAMP

Veronika Fedotova, Viktor Pilipiv

ID529

COMPARISON BETWEEN PLYOMETRIC AND ISOKINETIC TRAINING DURING THREE WEEKS ON ISOKINETIC STRENGTH IN SPORT SCIENCES STUDENTS

Isabel Parrilla, Asunción Martínez-Valencia, José María González-Ravé

ID485

ASSESSMENT OF DIFFERENT POWER PARAMETERS ON SQUAT AND LEG PRESS:
CONSIDERATIONS FOR POWER DEVELOPMENT

Juvenal Fernandes, Henrique Coimbra, João Carvalho, Luis Sánchez-Medina, Filipe Conceição

28.06.2011 10:00

Room 9

Applied Session: BIOMECHANICAL MODELLING

Chairperson: António Veloso

THE EVOLUTION OF POSE ESTIMATION ALGORITHMS FOR 3D MOTION CAPTURE DATA:
COPING WITH UNCERTAINTY

W. Scott Selbie

AN INVERSE METHOD FOR PREDICTING THE MECHANICS OF HOPPING FROM MOTION DATA
INPUT

Wangdo Kim & António Veloso

APPLICATION OF INDUCED ACCELERATION ANALYSIS AND COMPUTER SIMULATION IN SPORTS

Thomas Kepple

CAN FORWARD DYNAMIC SIMULATION MODELS BE USED TO IMPROVE THE PERFORMANCE OF TOP ATHLETES?

Maarten F. Bobbert & L.J. Richard Casius

MUSCLE SERIES ELASTICITY: THEORETICAL AND EXPERIMENTAL CONSIDERATIONS

Walter Herzog

28.06.2011 11:30

Exhibition Hall

Coffee-break

28.06.2011 12:00

Exhibition Hall

Poster Sessions 1 to 4

Poster Session 1 (Electromyography applied to Sports Biomechanics)

P1.1 - ID 548

CRICKET SIDE STRAIN INJURIES: A DESCRIPTION OF TRUNK MUSCLE ACTIVITY AND THE POTENTIAL INFLUENCE OF BOWLING TECHNIQUE

Kathleen Shorter, Andrew Nealon, Neal Smith, Mike Lauder

P1.2 - ID481

ONSET AND OFFSET OF RECTUS FEMORIS ACTIVATION DURING DOUBLE POLING ERGOMETRY IN TWO POSITIONS: STANDING VS. SITTING

Sarah K. Leissring, Randall L. Jensen, Jodi L. Tervo, Phillip B. Watts

P1.3 - ID558

INVESTIGATION OF ELECTROMYOGRAPHY OF MAJOR MUSCLE GROUPS WHILE HIKING OUT DURING SAILING ON BOTH LAND AND WATER

Chun Chuan Ritchie Tan, Jun Yong Toh, Kin Liao, Wei Xie

P1.4 - ID576

A STUDY OF MUSCLE FATIGUE FOR PROLONGED STANDING USING SURFACE ELECTROMYOGRAM: A CASE STUDY

S.J Janice Tan, Davy Lim, Wei Xie, Kin Liao

P1.5 - ID494

LOWER TRUNK MUSCLE ACTIVITY DURING FRONT CRAWL SWIMMING IN A SINGLE LEG AMPUTEE

Jonas Martens, Ingi Þór Einarsson, Naama Schnizer, Filip Staes, Daniel Daly

P1.6 - ID511

INFLUENCE OF AN EXERCISE PROGRAM IN THE PERONEAL REACTION TIME

Carlos Moreira, Paulo Carvalho, Camilo Moreira

P1.7 - ID 525

EMG OF THE TRANSVERSE ABDOMINUS AND MULTIFIDUS DURING PILATES EXERCISES

Paulo de Carvalho, Ana Pereira, Rubim Santos, João Paulo Vilas Boas

P1.8 - ID 435

MUSCULAR FATIGUE DURING 200 M FRONT CRAWL

Pedro Figueiredo, Suzana Pereira, Pedro Gonçalves, João Paulo Vilas-Boas, Ricardo J Fernandes

P1.9 - ID 550

MUSCLE ACTIVITY OF THE STANCE KNEE IN ELITE RACE WALKERS

Brian Hanley, Athanassios Bissas, Andi Drake

P1.10 - ID555

KINEMATIC AND ELECTROMYOGRAPHIC ANALYSIS OF UPPER EXTREMITY IN ARM WRESTLING

Meng-Kai Hong, Chih-Yu Lin, Yen-Sung Liao, Chih-Kai Hong, Lin-Hwa Wang

Poster Session 2 (Biomechanics of Gait and Running)

P2.1 - ID 432

COMPARISON OF GROUND REACTION FORCES BETWEEN IN-PLACE AND FORWARD WATER RUNNING AT TWO LEVELS OF IMMERSION

Heiliane B Fontana, Alessandro Haupenthal, Caroline Ruschel, André L A Pizzolatti, Paulo R Cerutti, Helio Roesler

P2.2 - ID 497

THE INFLUENCE OF BACKPACK CARRIAGE ON TRUNK POSTURE IN CHILDREN DURING UNPLANNED GAIT TERMINATION

Shi Wei Mo, Dong Qing Xu, Jia Song, Song Tao Hong, Jing Xian Li

P2.3 - ID 473

RUNNING ECONOMY AND GASTROCNEMIUS MUSCLE LENGTH DURING RUNNING FOR KENYAN AND JAPANESE ELITE DISTANCE RUNNERS

Yasushi Enomoto, Yuta Suzuki, Toshiharu Yokozawa, Hidetaka Okada

P2.4 - ID 398

THE INFLUENCE OF HIGH-INTENSITY RUN DURATION ON TIBIAL ACCELERATION AND SHOCK ATTENUATION

Adam Clansey, Michael Hanlon

P2.5 - ID579

A STUDY OF MOMENTS ACTING ON THE TIBIA DURING GAIT IN THE ACTIVE ELDERLY POPULATION

Mihai Voinescu, Denise Soares, Marcelo Castro , Emília Mendes, Arjana Davidescu, Leandro Machado

P2.6 - ID 563

IS AVERAGE SPEED CONTROL SENSITIVE ENOUGH TO ENSURE NON-ACCELERATED RUNNING IN THE ANALYSIS OF RUNNING MECHANICS?

Steffen Willwacher, Katina Fischer, Gert – Peter Brüggemann

P2.7 - ID 578

GROUND REACTION FORCES OF NATIONAL LEVEL RACE WALKERS

Brian Hanley, Andi Drake, Athanassios Bissas

P2.8 - ID 561

JOINT MOMENTS OF THE LOWER EXTREMITIES OF CHIRUNNING TECHNIQUE IN CHIRUNNERS: A PILOT STUDY

Adam Teav, Jing Xian Li

Poster Session 3 (Biomechanics of Team Sports)

P3.1 - ID 509

LINEAR AND ANGULAR CONTRIBUTIONS TO BALL VELOCITY IN THE DELIVERY MOTION AMONG VARIOUS LEVELS OF BASEBALL INFIELDER

Tomohisa Miyanishi, Naoki Sakurai

P3.2 - ID 451

FORCE GENERATION IN MALE BASKETBALL PLAYERS

Carmen Ferragut, Nuria Rodriguez, Helena Vila

P3.3 - ID 444

COMPARISON OF THE HAND-DRIBBLING MOTION BETWEEN SKILLED AND UNSKILLED SUBJECTS

Kai Hirata, Masatoshi Sawamura, Michiyoshi Ae, Yasuto Kobayashi

P3.4 - ID 489

GENDER DIFFERENCES ON LOWER LIMB COORDINATION DURING ELITE PLAYERS JUMP

MA Castro, MA Janeira, Rui Mendes, Orlando Fernandes, Nuno Ferreira

P3.5 - ID 513

QUANTITATIVE ANALYSIS OF FUTSAL PLAYERS' ORGANIZATION ON THE COURT

Felipe Arruda Moura, Juliana Exel Santana, Ana Lorena Marche, Tiago Henrique Aguiar, Ana Carolina M. A. Rodrigues, Ricardo Machado Leite de Barros, Sergio Augusto Cunha

P3.6 - ID 598

BIOMECHANICS OF THE PENALTY STROKE IN ROLLER HOCKEY

Mário A P Vaz, Nuno Ramos, João Abrantes, F Queirós de Melo, Filipe Conceição

P3.7 - ID 192 (NIA)

THE RELATIONSHIP BETWEEN MAXIMAL STRENGTH AND PLYOMETRIC ABILITY IN RUGBY PLAYERS

Charlotte Dymond, Eamonn P. Flanagan, Anthony P. Turner

P3.8 - ID 272

RELIABILITY OF JUMP AND PERFORMANCE MEASURES IN RUGBY UNION PLAYERS

Randall L. Jensen, Laura-Anne M. Furlong, Darragh Graham, Andrew J. Harrison

P3.9 - ID 227

THE EFFECT OF A GAME-SPECIFIC SHORT TERM FATIGUE PROTOCOL ON KICKING IN AUSTRALIAN FOOTBALL

Evan Coventry, Kevin Ball, Lucy Parrington, Simon Taylor, Robert Aughey, Michael McKenna

P3.10 - ID 527

BILATERAL STRENGTH TESTING IN DOMINANT AND NON-DOMINANT PLANT LEG IN SOCCER PLAYERS

Barbara L. Warren, Melissa Abellanida

Poster Session 4 (Miscellaneous)

P4.1 - ID517

EFFECTS OF EIGHT-WEEK WHOLE-BODY VIBRATION TRAINING ON POSTURAL STABILITY IN ELDERLY ADULTS

Wei-Hsiu Lin , Jun-Dar Lin , Yen-Ting Wang, Alex J. Y. Lee

P4.2 - ID 410

ACUTE EFFECT OF VIBRATORY STIMULATION ON ELBOW JOINT FLEXOR PERFORMANCE

Jui-hung Tu, Chia-hsiang Chen, Yung-hsing Chiu

P4.3 - ID502 (NIA)

ENHANCED BALANCE AND BONE MINERAL DENSITY ASSOCIATED WITH DIFFERENT EXERCISE TRAINING PROGRAMS IN OLDER WOMEN

Elisa A Marques, Flávia Wanderley, Leandro Machado, Filipa Sousa, Pedro Moreira, Jorge Mota, Joana Carvalho

P4.4 - ID 580

LONG JUMP KINEMATICS OF WORD CLASS ATHLETES WITH AN INTELLECTUAL DISABILITY

Wolfgang Potthast, Steffen Willwacher, Ralf Müller, Gert-Peter Brüggemann

P4.5 - ID 551

STRIDE REGULATION AT THE APPROACH PHASE OF LONG JUMP IN VISUALLY IMPAIRED (F13) ATHLETES

Apostolos Theodorou, Skordilis Emmanouil, Evangelos Tasoulas, Flora Panteli, Athanasia Smirniotou, Paradisis Georgios

P4.6 - ID 440 (NIA)

THE DIFFERENCES BETWEEN DOUBLE AND SINGLE LEG TAKEOFF ON JOINT KINETICS DURING REBOUND-TYPE JUMP

Yasushi Kariyama, Kenichi Mori, Mitsugi Ogata

P4.7 - ID 575

DOES SYMMETRY OF LOWER LIMB KINETICS EXIST IN SITTING AND STANDING TASKS?

Daniel Varin, Mario Lamontagne, Paul E. Beaulé

P4.8 - ID441

EFFECT OF CATHODAL TRANSCRANIAL DIRECT CURRENT STIMULATION ON LOWER LIMBS MUSCULAR FATIGUE DURING ISOKINETIC PROTOCOL

Ricardo Braga, Jonas Gurgel, Raphaela Alvarenga, Flávia Porto, Rafael Montenegro, Gabriel Espinosa, Alex Itaborahy, Paulo Farinatti

P4.9 - ID487

EFFECT OF CATHODAL TRANSCRANIAL DIRECT CURRENT STIMULATION OVER AN ANTAGONISTIC CO-ACTIVATION DURING AN ISOKINETIC PROTOCOL

Marcus Paulo de Andrade, Jonas Gurgel, José Neto, Flávia Porto, Rafael Montenegro, Gabriel Espinosa, Alex Itaborahy, Paulo Farinatti

P4.10 - ID486

EFFECT OF ANODAL TRANSCRANIAL DIRECT CURRENT STIMULATION ON LOWER LIMBS MUSCULAR FATIGUE DURING ISOKINETIC PROTOCOL

Rebecca Cantreva, Jonas Gurgel, Gabriela Moreira, Flávia Porto, Rafael Montenegro, Gabriel Espinosa, Alex Itaborahy, Paulo Farinatti

28.06.2011 13:00

Faculty Restaurant & Sports areas (Super Bock Lounge)

Lunch & Animated Sports Activities (Aero-Step)

28.06.2011 14:30

Auditorium

Conference 3

Carlo de Luca

CONTROL OF MOTOR UNITS DURING VOLUNTARY ISOMETRIC FORCE-PRODUCTION:
IMPLICATIONS FOR EXERCISE

Chairperson: Drew Harrison

28.06.2011 15:30

Auditorium

Oral Session 3 (Electromyography applied to Sports Biomechanics)

Chairperson: Leandro Machado

ID419

THE EFFECT OF JUVENILE IDIOPATHIC ARTHRITIS ON LOWER LIMB MUSCLE ACTIVITY IN THE PROPULSION PHASE OF THE COUNTER MOVEMENT JUMP

Kevin Dwyer, Matthew J Kennedy, Mario Lamontagne, Johannes Roth

ID454

THE EFFECTS OF WEARING SPANDEX WEAR WITH COMPRESSION BAND ON MUSCLE ACTIVITY DURING A GOLF SWING

Dong-soo Kim, Woen-sik Chae, Young-tae Lim, Ho-youl Kang, Chang-soo Yang, Gye-san Lee, Nyeon-ju Kang

ID520

SEMG MEASUREMENTS ON LAND AND IN WATER PRIOR TO AND AFTER 60-90 MINUTES OF SUBMERSION (SWIMMING) ARE HIGHLY RELIABLE

Bjørn Harald Olstad, Jan Cabri, Christoph Zinner, Neuza Nunes, Per-Ludvik Kjendlie

ID568

ELECTROMYOGRAPHIC ANALYSIS OF IMPINGEMENT SYNDROME: COMPARISON IN VOLLEYBALL ATHLETES

Leonor Oliveira, Camilo Moreira, Paulo Carvalho

ID570

THE SWALLOW ELEMENT AND MUSCULAR ACTIVATIONS

Manuel Campos, Filipa Sousa, Eunice Lebre

ID584

A PRELIMINARY STUDY ON HOW FATIGUE AFFECTS SCORING AVERAGE IN PROFESSIONAL DARTS

Michael Walsh, Magdalena Tyndyk, John Barton, Brendan O'Flynn, Cian O'Mathuna

28.06.2011 15:30

Room 1

Oral Session 4 (Biomechanics of Individual Sports – Cycling and Kayaking)

Chairperson: Ross Sanders

ID420

INFLUENCE OF RACING POSITION ON CYCLING PATTERNS

Umberto Emanuele, Tamara Horn, Jachen Denoth

ID426

STATIC VERSUS DYNAMIC EVALUATION IN BIKE FITTING: INFLUENCE OF SADDLE HEIGHT ON LOWER LIMB KINEMATICS

Ventura Ferrer-Roca, Andreu Roig, Pedro Galilea, Juan García-López

ID480

PHYSIOLOGICAL AND ELECTROMYOGRAPHIC RESPONSES AT THREE LEVELS OF BICYCLE SEAT HEIGHT

Yi-Ling Chen, Hsin-Wei Huang, Pin-Hui Chen, Yu-Ming Lee, Heng-Ju Lee

ID515

3D KINEMATICS APPLIED TO THE STUDY OF INDIVIDUAL BMX GATE START TECHNIQUE

Kostas Gianikellis, Andreas Skiadopoulos, Alonso Bote

ID428 (NIA)

KINEMATICS IN ELITE KAYAKERS WHILE PADDLING A SLIDING ERGOMETER EQUIPPED WITH STANDARD AND SWIVEL SEATS

Vincent Fohanno, Floren Colloud, Khalil Ben Mansour, Patrick Lacouture

ID437

ANALYSIS OF THE ON-WATER PADDLING FORCE PROFILE OF AN ELITE KAYAKER

Beatriz Gomes, Nuno Viriato, Ross Sanders, Filipe Conceição, João Paulo Vilas-Boas, Mário Vaz

28.06.2011 15:30

Room 9

Oral Session 5 (Biomechanics of Individual Sports)

Chairperson: Jacqueline Alderson

ID491

A COMPARISON OF PLANTAR PRESSURES BETWEEN TWO DIFFERENT PLAYING SURFACES IN TENNIS

Michael Eckl, Philipp Kornfeind, Arnold Baca

ID569 (NIA)

THE IMPORTANCE OF WRIST FLEXION AND X-FACTOR IN THE GOLF SWING: A FORWARD KINEMATIC APPROACH

Matthew Sweeney, Peter Mills, Jacqueline Alderson, Bruce Elliott

ID577

HITTING TO DIFFERENT SPOTS ON THE COURT: THE BALL KINEMATICS OF THE PROFESSIONAL TENNIS SERVICE

Machar Reid, David Whiteside, Bruce Elliott

ID536

KINETIC ANALYSES OF TWO FENCING ATTACKS—LUNGE AND FLECHE

Nathan Morris, Mark Farnsworth, D.G.E. Robertson

ID523

THE RELATIONSHIP BETWEEN THE BARBELL TRAJECTORIES OF SNATCH AND BCH ANGLES

Yi-Hsuan Chen, Hung-Ta Chiu

ID469

BIOMECHANICAL ANALYSIS OF THE EVADING WITH PUSHING TECHNIQUE IN TAI CHI PUSH HANDS

Hui-Chuan Chen, Shih-Yu Kuo, Kuangyou B. Cheng

28.06.2011 15:30

Exhibition Hall – Indoor track

Applied Session: TRACK AND FIELD - JUMPS

Chairperson: Filipe Conceição

DATA COLLECTION IN LONG JUMP

Athletes Preparation and Familiarization with equipments and procedures, in parallel with:
ESTABLISHING THE MAIN FOCUS IN DATA COLLECTION (20'):

Gert-Peter Brüggemann

Mark King

Nick Linthorne

DATA COLLECTION - LONG JUMP RUN-UP, TAKE-OFF AND AERIAL PHASE (45'):

Measurement of approach run velocities, three dimensional measurements of athletes' performance and ground reaction forces during take-off and during the aerial phase.



Invited Athletes:

Naide Gomes

World Indoor Champion

Gaspar Araujo

2004 European Team Champion (Turkey) LJ – 8,15m (v) 8,10m (1st)

Marcus Caldeira

2007 European Juniors Championship (3rd);

28.06.2011 17:00

Exhibition Hall – Coffee-break

28.06.2011 17:30

Auditorium

Oral Session 6 (Biomechanics of Injuries and Treatment)

Chairperson: Herman Schwameder

ID314

INFLUENCE OF TWO TAPINGS ON THE REACTION TIME OF THE PERONEAL MUSCLES

A Ferreira, P Monteiro, P Carvalho, Camilo Moreira

ID417 (NIA)

NEUROMUSCULAR ADAPTATIONS TO BALANCE AND TECHNIQUE TRAINING DURING
SIDESTEPPING: IMPLICATIONS FOR ACL INJURY RISK

Cyril Donnelly, Bruce Elliott, Tim Doyle, Caroline Finch, Alasdair Dempsey, David Lloyd

ID492 (NIA)

JOINT KINEMATICS OF LANDING IN ACL REHABILITATED VOLUNTEERS

Sarah Breen, Andrew J. Harrison, Ian C. Kenny

ID493

BODY KINEMATICS DURING SINGLE-LEG LANDING FROM VARYING HEIGHTS AND
DISTANCES– IMPLICATIONS FOR NON-CONTACT ACL INJURIES: CASE REPORT

Nicholas Ali, D. Gordon, E. Robertson, Gholamreza Rouhi

ID498

THE ANTERIOR CRUCIATE LIGAMENT INJURY PREVENTION PROGRAM: A META-ANALYSIS

Chang-Soo Yang, Gye-San Lee, Jin-Goo Kim, Yong-Seuk Lee, Chul-Soo Chung, In-Sik Shin,
Young-Hoo Kwon, Suk-In Lee, Jin Yoo, Bee-Oh Lim

ID544 (NIA)

EFFECT OF BRACE TYPE ON KNEE JOINT LAXITY AND FUNCTIONAL ACHIEVEMENTS FOR
PATIENTS WITH ACL RUPTURED KNEES

Gerda Strutzenberger, Michel Braig, Stefan Sell, Hermann Schwameder

28.06.2011 17:30

Room 1

Oral Session 7 (Biomechanical Modelling and Simulation)

Chairperson: Maarten Bobbert

ID470

A VIRTUAL CRANKSHAFT THIGH MODEL TO ESTIMATE TIBIAL-FEMORAL TRANSVERSE PLANE
KINEMATICS

Daniel N. Bassett, Matteo R. Bosisio, Thomas S. Buchanan, Mario Lamontagne, Giuliano G.
Cerulli

ID500 (NIA)

BIOMECHANICAL MODELLING FOR COMPUTATION OF KNEE JOINT TORQUE IN DIFFERENT STRATEGIES OF STOP-JUMP LANDING

Leili Mahdieh, Shahram Lenjannejadian, Gholamali Ghasemi, Mehrdad Poorsina, Sara Mirtavoosi

ID507

OPTIMALITY CRITERIA FOR HUMAN RUNNING INVESTIGATED BY FORWARD DYNAMICS SIMULATIONS

Ross H. Miller, Brian R. Umberger, Graham E. Caldwell

ID552

ID552 (NIA)

COMPUTATION OF ANKLE TORQUE IN DIFFERENT STRATEGIES OF LANDING BY DYNAMIC MODELLING

Sara Mirtavoosi, Shahram Lenjannejadian, Khalil Khayambashi, Hamid Salehi, Leili Mahdieh

ID373

GROUND REACTION FORCE AND PLANTAR PRESSURE OF TWO JUMPING HEAD-OUT AQUATIC EXERCISES

M^a Margarida Espanha, Júlia Teles, Valquíria Alves, Sandra Pais

ID266

KINETICS OF THE LOWER EXTEREMITIES IN ERGOMETER ROWING DEPEND ON BODY MASS INDEX

Karen Roemer, Stephanie Hamilton, Chris Richter

28.06.2011 17:30

Room 9

Applied Session: TRACK AND FIELD - JUMPS

Chairperson: Filipe Conceição

TAKE-OFF FORCES AND IMPULSES IN THE LONG JUMP

Nick Linthorne

COMPUTER SIMULATION OF THE TAKEOFF PHASE IN RUNNING JUMPS

Mark King

ASSOCIATION OF MUSCLE-TENDON MECHANICAL PROPERTIES AND JUMPING PERFORMANCE - SOME BIOMECHANICAL CONSIDERATIONS

Gert-Peter Brueggemann

PRESENTATION OF THE JUMPS' DATA COLLECTED

Filipe Conceição

28.06.2011 19:00

Super Bock Lounge

Happy-hour – Academic “Tuna Songs”

28.06.2011 20:00

Super Bock Lounge



“Delsys” Barbecue – St. Peter’s Popular Night

Ethnographic Performance - NEFUP

28.06.2011 23:00

Bus Shuttle to Hotels

29.06.2011 08:30

Bus Shuttle from Hotels

29.06.2011 09:00

Auditorium

Conference 4

Mark King

COMPUTER SIMULATION MODELLING IN SPORTS BIOMECHANICS

Chairperson: Mário Vaz

29.06.2011 10:00

Auditorium

Oral Session 8 (Biomechanical Modelling and Simulation)

Chairperson: Wangdo Kim

ID450

ELECTROMYOGRAPHIC WAVELET ANALYSIS OF LOWER EXTERMITY MUSCLES DURING SPRINT START AND TWO SUBSEQUENT STEPS

Saeed Ilbeigi, Bart Van Gheluwe

ID27

RELATIVE CONTRIBUTION OF THE JOINT MOMENTS TO THE ANGULAR ACCELERATION OF THE LOWER LIMB IN HOPING EXERCISE

Filipa João, António Veloso

ID540

OPTIMAL STRATEGIES IN DIVING FOR DIVES OF THE REVERSE GROUP VIA EVOLUTIONARY ALGORITHMS

Axel Schüller, Thomas Köthe, Thomas Molka, Falk Hildebrand

ID300 (NIA)

IS THE PRINCIPAL COMPONENT ANALYSIS A MORE EFFICIENT METHOD TO DETECT DIFFERENCES ON BIOMECHANICAL VARIABLES BETWEEN GROUPS OF PARTICIPANTS?

Giulia Mantovani, Mario Lamontagne, Daniel Varin, Giuliano G. Cerulli, Paul E. Beaulé

ID399 (NIA)

ANALYSIS OF THE CONTRACTION OF THE PUBOVISCERAL MUSCLE BASED ON A COMPUTATIONAL MODEL

Thuane da Roza, Maíta Poli de Araújo, Teresa Mascarenhas, Joana Loureiro, Marco Parente, Renato Natal Jorge

ID457

MODELLING THE BEHAVIOUR OF SERIES ELASTIC ELEMENT DURING IMPULSIVE MOVEMENTS
Filipe Conceição, João Carvalho

29.06.2011 10:00

Room 1

Oral Session 9 (Biomechanics of Gait and Running)

Chairperson: John Ostarello

ID508 (NIA)

AN INVESTIGATION INTO THE WITHIN AND BETWEEN PARTICIPANT VARIANCE IN THREE-DIMENSIONAL BREAST KINEMATIC DATA DURING A 5 KM RUN
Alexandra Milligan, Joanna Scurr, Chris Mills, Louise Wood

ID543

THE EFFECT OF CHANGING-SPEED ON THE TOE HEIGHT ON TREADMILL RUNNING
Ya-Han Chang, Pei-Wei Chi, Hung-Ta Chiu

ID458

EFFECTS OF FATIGUE ON THE LEG KINETICS IN ALL-OUT 600M RUNNING
Hirosuke Kadono, Michiyoshi Ae, Yuta Suzuki, Kazuhito Shibayama

ID397 (NIA)

THE EFFECT OF THE BEND ON TECHNIQUE AND PERFORMANCE DURING MAXIMAL SPEED SPRINTING
Sarah M. Churchill, Aki I.T. Salo, Grant Trewartha

ID421

CHANGES IN STEP CHARACTERISTICS DURING SPRINT PERFORMANCE DEVELOPMENT
Laura Charalambous, David G. Kerwin, Gareth Irwin, Ian N. Bezodis, Stephen Hailes

29.06.2011 10:00

Room 9

Oral Session 10 (Biomechanical Instrumentation & Evaluation Methods)

Chairperson: Rafael Bahamonde

ID127

THE EFFECT OF DIGITAL FILTERING PROCEDURES ON KNEE JOINT MOMENTS IN SPRINTING
Neil E. Bezodis, Aki I. T. Salo, Grant Trewartha

ID395

COMPARISON OF VERFICAL GRF OBTAINED FROM FORCE PLATE, PRESSURE PLATE AND INSOLE PRESSURE SYSTEM
Marcelo Castro, Denise Soares, Leandro Machado

ID396

A COMPARISON OF VERTICAL JUMP DISPLACEMENTS BETWEEN A VERTEC™ AND A FORCEPLATE

Bryan Christensen, Sarah Hilgers, John Schuna Jr, Casey Radenic, Kassie Krebsbach, Donna Terbizan, Jared Tucker, Trista Manikowske, Gary Liguori

ID482 (NIA)

APPLICATION OF PRINCIPAL COMPONENT ANALYSIS IN THE STUDY OF TASKS WITH DIFFERENT MECHANICAL CONSTRAINTS

Gustavo Leporace, Adriane M. Muniz, Glauber Pereira, Leonardo Metsavaht, Luiz Alberto Batista, Jurandir Nadal

ID252

WIRELESS VERTICAL DISPLACEMENT MEASUREMENT DURING RUNNING USING AN ACCELEROMETER AND A MOBILE PHONE

Martin Eriksson, Dennis Sturm, Kjartan A. Halvorsen, Lennart Gullstrand

ID286

IN VIVO MEASUREMENT OF STIFFNESS AND VISCOSITY OF SURAL TRICEPS

F. París-García, A. Barroso, J. Ribas, J. Cañas, F. Paris

29.06.2011 11:30

Exhibition Hall

Coffee-break

29.06.2011 12:00

Exhibition Hall

Poster Sessions 5 to 7

Poster Session 5 (Biomechanics of Gait and Running)

P5.1 - ID 542

A CASE STUDY ON GROUND REACTION FORCES IN SPRINT HURDLES

Kazuhito Shibayama, Norihisa Fujii, Shunsuke Takenaka, Satoru Tanigawa, Michiyoshi Ae

P5.2 - ID 587

Dynamometric Analysis of resisted sled on sprint rUN

Mário Nogueira, Nuno Viriato, Mário Vaz, João Carvalho, Filipe Conceição

P5.3 - ID 595

STANDARD MOTION OF SPRINT RUNNING FOR MALE ELITE AND STUDENT SPRINTERS

Keita Yada, Michiyoshi Ae, Satoru Tanigawa, Akira Ito, Koji Fukuda, Kota Kijima

P5.4 - ID 594

SAGITTAL AND FRONTAL LOWER LIMBS KINETICS DURING STEPPING DOWN IN TAICHI ELDERLY

Tzu-Hsiang Yang, Chen-Fu Huang, Jung-Chun Chi

P5.5 - ID 545

KINETICS OF THE SUPPORT LEG JOINTS IN THE SIDE STEP CUTTING TECHNIQUE

Yuta Suzuki, Michiyoshi Ae, Shunsuke Takenaka, Norihisa Fujii

P5.6 - ID 422

CHANGE IN TRUNK MUSCLE ACTIVITY DURING INCLINE TREADMILL RUNNING

Paul T. Ewbank, Randall L. Jensen

P5.7 - ID 518

CHANGES IN FOOT CHARACTERISTICS AFTER A 3-HOUR EXERCISE BOUT

Bryson Nakamura, Heidi Orloff, Sean Field-Eaton, Erienne Olesh

P5.8 - ID 126

INFLUENCE OF ANKLE PASSIVE RANGE OF MOTION ON THE PERFORMANCE OF THE STAR EXCURSION BALANCE TEST

GG Zeitoune, G Leporace, SM Pinto, MG Zeitoune, LA Batista

P5.9 - ID478

KINEMATICS AND KINETICS OF THE SWING LEG IN A RUMBA WALK

Raul Landeo, Michael Chang

Poster Session 6 (Biomechanics of Individual Sports)

P6.1 - ID 151

GIANT SWINGS WITH TURNS COMPLETED TO HANDSTAND ON UNEVEN BARS

Kylie Thomas, Elizabeth J. Bradshaw

P6.2 - ID 430 (NIA)

INFLUENCE OF A SUSPENDED AID ON THE AMPLITUDE VARIABLES OF CIRCLES ON POMMEL HORSE

Toshiyuki Fujihara, Pierre Gervais

P6.3 - ID 431 (NIA)

INFLUENCE OF A SUSPENDED AID ON THE HIP MOMENT PROFILES DURING CIRCLES ON POMMEL HORSE

Toshiyuki Fujihara, Pierre Gervais

P6.4 - ID 48 (NIA)

INFLUENCE OF A SUSPENDED AID ON WRIST LOADING PATTERN DURING CIRCLES ON POMMEL HORSE

Toshiyuki Fujihara, Pierre Gervais

P6.5 - ID 285

COMPARATIVE STUDY OF GIANT SWINGS ON THE PARALLEL BARS

Spiros Prassas

P6.6 - ID 592

KINEMATIC ANALYSIS OF RING-SHAPE LEAP AFTER STEPPED UP THE LEGS AND BACKWARD BALANCE IN ARTISTIC GYMNASTICS

Liang Cheng, Xi Li, Jihe Zhou

P6.7 - ID 349

Kinematics and angular momentum contributions to the TOE-on Tkachev on Uneven Bars in female gymnastics

Gareth Irwin, Michelle Manning, David G. Kerwin

P6.8 - ID 562

THE CENTER OF MASS TRAJECTORY DURING FIXED-STANCE PUSH HANDS MOVEMENTS OF TAI CHI CHUAN

Lin-Hwa Wang, Kuo-Cheng Lo, Sheng-Weng Shih, Fong-Chin Su

P6.9 - ID 589

ANALYSIS OF THE TAKEOFF MOTION FOR THE WORLD TOP FEMALE TRIPLE JUMPERS

Ai Tsukuno, Michiyoshi Ae, Hiroyuki Koyama, Yuya Muraki, Megumi Takamoto

P6.10 - ID 574 (NIA)

THE IMPACT OF BODY MASS AND SKILL LEVEL ON ROWING KINEMATICS

Chris Richter, Stephanie Hamilton, Karen Roemer

Poster Session 7 (Miscellaneous)

P7.1 - ID 415

KINETIC ANALYSIS OF EACH HAND IN BASEBALL BATTING MOTION AT DIFFERENT HITTING POINT HEIGHTS

Kazumichi Ae, Sekiya Koike

P7.2 - ID 549

INFLUENCE OF THE FOOT-FLOOR INTERFACE ON SQUATTING PERFORMANCE

Kathleen Shorter, Jason Lake, Neal Smith, Mike Lauder

P7.3 - ID 474

MOMENTS IN THE KNEE AND HIP DURING DESCENT AND ASCENT OF SQUATS

Turgut Gülay, Renate List, Silvio Lorenzetti

P7.4 - ID 453

INFLUENCE OF ANKLE TAPING ON DYNAMIC BALANCE PERFORMANCE

Ian C. Kenny, Can Wu, Johnson McEvoy

P7.5 - ID 496 (NIA)

**HIP AND LUMBO-PELVIC STRENGTH IN SUBJECTS WITH PATELLOFEMORAL PAIN SYNDROME:
A SYSTEMATIC REVIEW OF THE LITERATURE**

Gustavo Leporace, Rodrigo Paiva, Leonardo Metsavaht, Luiz Alberto Batista

P7.6 - ID 466

**Estimating Anterior Tibial Translation from Model-based Image-Matching of a Noncontact
ACL Injury in Professional Soccer**

Hideyuki Koga, Roald Bahr, Tron Krosshaug

P7.7 - ID 405

A BIOMECHANICAL ANALYSIS OF FRONT VERSUS BACK SQUAT: INJURY IMPLICATIONS.

D. Diggin, C. O'Regan, N. Whelan, S. Daly, V. McLoughlin, L. McNamara, A. Reilly

P7.8 - ID 582

COMPARISON OF TIBIAL IMPACT ACCELERATIONS: Video vs ACCELEROMETER

Erich J. Petushek, Chris Richter, David Donovan, William P. Ebben, Randall L. Jensen

P7.9 - ID 452

**SHOULDER KINETICS DURING PITCHING AND THEIR RELATION TO REPORTED SHOULDER
PAIN**

David Keeley, Gretchen Oliver, Christopher Dougherty

P7.10 - ID 467

**LOWERING VELOCITY OF THE CENTRE OF MASS DURING THE APPROACH AFFECTS JUMP
HEIGHT IN VOLLEYBALL SPIKE JUMPS**

Claas H. Kuhlmann, Karen Roemer, Thomas L. Milani

29.06.2011 13:00

Faculty Restaurant & Sports areas (Gymnastics' Pavilion)

Lunch & Animated Sports Activities (Escalade)

29.06.2011 14:30-18:00

Bus Shuttle for the Social Tour

Historic Porto, and Port Wine Peddy-Paper

Return to Hotels

30.06.2011 08:30

Bus Shuttles from Hotels

30.06.2011 09:00

Auditorium

Conference 5

Walter Herzog

UNDERSTANDING MUSCLE PROPERTIES IN SPORTS PERFORMANCE OPTIMIZATION

Chairperson: António Veloso

30.06.2011 10:00

Auditorium

Oral Session 11 (Biomechanics of Muscles and Connective Tissue)

Chairperson: João Abrantes

ID408 (NIA)

DOES TECHNIQUE CHANGE AFFECT MUSCULAR SUPPORT AT THE KNEE IN SIDESTEP CUTTING?

Alasdair R Dempsey, Bruce C Elliott, David G Lloyd

ID583 (NIA)

SIDESTEP CUTTING TECHNIQUE AND KNEE VALGUS MOMENTS

Eirik Kristianslund, Tron Krosshaug

ID325

NON INVASIVE MONITORING OF IN-VIVO MUSCLE-TENDON MECHANICAL PROPERTIES OF ATHLETES WITH AN ULTRASONIC DETECTION SCHEME

M. Zakir Hossain, Wolfgang Grill

ID90

TRICEPS SURAE MUSCULOTENDINOUS STIFFNESS: RELATIVE DIFFERENCES BETWEEN SOCCER AND NON-SOCCER PLAYERS

Aurélio Faria, Ronaldo Gabriel, João Abrantes, Paola Wood, Helena Moreira

ID477

INFLUENCE OF ATHLETIC TRAINING ON VERTICAL STIFFNESS ATTENUATION

Emma L. Millett, Raul Landeo

ID461 (NIA)

JOINT MOTION AND STIFFNESS REGULATION OF THE KNEE JOINT IN CHOICE REACTION SIDESTEP CUT TASKS

Kenji Kimura, Shinji Sakurai

30.06.2011 10:00

Room 1

Oral Session 12 (Biomechanics of Individual Sports – Track and Field)

Chairperson: Kostas Gianikellis

ID103

BIOMECHANICAL ANALYSIS AND FUNCTIONAL ASSESSMENT OF DAYRON ROBLES, WORLD RECORD HOLDER AND OLYMPIC CHAMPION IN 110 M HURDLES

José Luis López, Josep Maria Padullés, Helena Josefin Olsson

ID262

CHANGES IN STEP CHARACTERISTICS BETWEEN THE MAXIMUM VELOCITY AND DECELERATION PHASES OF THE 100 METRE SPRINT RUN

Ian N. Bezodis, Gareth Irwin, Gregor Kuntze, David G. Kerwin

ID57

INTRA-LIMB KINEMATIC STRATEGIES OF MAXIMUM VELOCITY PHASE SPRINT RUNNING PERFORMANCES

Marianne Gittoes, Ian Bezodis, Cassie Wilson

ID465

TARGET VALUE FOR THE MAXIMUM RUN-UP SPEED OF THE LONG JUMP BASED ON THE PERFORMANCE LEVEL

Hiroyuki Koyama, Yuya Muraki, Michiyoshi Ae

ID 590

EFFECT OF AGE ON HIGH JUMP TAKEOFF BIOMECHANICS

Javier Bermejo, José Manuel Palao, José L. L. Elvira

ID 160 (NIA)

LOWER-LIMB BIOMECHANICAL ASYMMETRY IN MAXIMAL VELOCITY SPRINT RUNNING

Timothy Exell, David Kerwin, Gareth Irwin, Marianne Gittoes

30.06.2011 10:00

Room 9

Oral Session 13 (Biomechanical Instrumentation & Evaluation Methods)

Chairperson: Chenfu (Peter) Huang

ID530

COMPARISON OF WAVE DRAG FOR BOTH THE MALE AND FEMALE FORM

David Pease, Ross Vennell

ID412

FRONTCRAWL PROPULSIVE PHASE DETECTION USING INERTIAL SENSORS

Farzin Dadashi, Florent Crettenand, Gregoire Millet, Ludovic Seifert, John Komar, Kamiar Aminian

ID503

ESTIMATION OF ACTIVE DRAG USING AN ASSISTED TOW OF HIGHER THAN MAX SWIM VELOCITY THAT ALLOWS FLUCTUATING VELOCITY & VARYING TOW FORCE

Bruce Mason, Gina Sacilotto, Tracey Menzies

ID564 (NIA)

UNDERWATER COMPARISON OF WAND AND 2D PLANE NONLINEAR CAMERA CALIBRATION METHODS

Amanda P. Silvatti, Thiago Telles, Fábio A. S. Dias, Pietro Cerveri, Ricardo M. L. Barros

ID514

FORCE AND CENTER OF PRESSURE EVALUATION WITH AN INSTRUMENTED PLATFORM FOR SWIMMING PERFORMANCE OPTIMIZATION

Luis Mourão, Leandro Machado, Ricardo Fernandes, J. Paulo Vilas-Boas, Mário Vaz

ID443

RELIABILITY OF A NEW METHOD TO ANALYSE AND TO QUANTIFY ATHLETES' DISPLACEMENT

João Serrano, Orlando Fernandes

30.06.2011 11:30

Exhibition Hall

Coffee-break

30.06.2011 12:00

Exhibition Hall

Poster Sessions 8 to 10

Poster Session 8 (Biomechanics of Individual Sports)

P8.1 - ID 404

KINEMATICAL AND NEUROMUSCULAR ASPECTS RELATED TO PERFORMANCE DURING THE SWIMMING START

Daniele Detanico, Stephanie Iara Heidorn, Juliano Dal Pupo, Fernando Diefenthaler, Saray Giovana dos Santos

P8.2 - ID 537

COMPARATIVE ANALYSIS OF TEMPORAL PARAMETERS OF DIFFERENT TECHNIQUES OF THE FREESTYLE FLIP TURN

Suzana M Pereira, Caroline Ruschel, Thiago G Souza, Luciana G Araujo, Pedro Gonçalves, Ricardo Fernandes, Helio Roesler, João Paulo Vilas-Boas

P8.3 - ID433

MUSCULAR AND ARM CRAWL STROKE POWER: EVALUATING THEIR RELATIONSHIP

Rocio Dominguez-Castells, Raul Arellano

P8.4 - ID 438

**13th FINA WORLD CHAMPIONSHIP FINALS: STROKE KINEMATICS AND RACE TIMES
ACCORDING TO PERFORMANCE, GENDER AND EVENT**

Sérgio Jesus, Mário J Costa, Daniel A Marinho, Nuno D Garrido, António J Silva, Tiago M Barbosa

P8.5 - ID571

ARM SYMMETRY IN 11-13 YEARS OLD FRONT CRAWL SWIMMERS

Ana Silva, Pedro Figueiredo, Susana Soares, João Paulo Vilas-Boas, Ricardo J. Fernandes

P8.6 - ID 400

**ELECTROMYOGRAPHIC ANALYSIS OF TWO DIFFERENT FEET POSITIONS IN BACKSTROKE
START**

Karla de Jesus, Kelly de Jesus, Pedro Figueiredo, Pedro Gonçalves, Suzana Pereira, João Paulo Vilas-Boas, Ricardo Fernandes

P8.7 - ID 436

THE EFFECT OF FATIGUE ON THE 200 M FRONT CRAWL UNDERWATER STROKE PATTERN

Pedro Figueiredo, Rafael Nazário, André Cereja, João Paulo Vilas-Boas, Ricardo J Fernandes

P8.8 - ID 501

**THE RELATIONSHIP BETWEEN FRONT CRAWL PERFORMANCE AND HYDRODYNAMICS IN
YOUNG FEMALE SWIMMERS**

Daniel A. Marinho, Roberto Oliveira, Nuno D. Garrido, Tiago M. Barbosa, Mário J. Costa, António J. Silva, Aldo M. Costa

P8.9 - ID 596

A KINEMATIC ANALYSIS OF THE BREASTROKE KICK

Eric Matheson, Young Hwang, Jennifer Romack, William Whiting, Konstantinos Vrongistinos

P8.10 - ID 546

**LOAD DURING THE VERTICAL JUMP IN WATER: VALUES FOR PRESCRIPTION IN
HYDROTHERAPY**

Alessandro Haupenthal, Caroline Ruschel, Heiliane B Fontana, Daniela P Santos, Paulo R Cerutti, Helio Roesler

Poster Session 9 (Biomechanical Instrumentation & Evaluation Methods)

P9.1 - ID 531

THE EFFECT OF DIRECT VIDEO FEEDBACK ON PERFORMANCE OF TENNIS SERVE

Ruhil A. Razali, Edin K. Suwarganda, Izwan M. Zawaki

P9.2 - ID 484

PRELIMINARY ANALYSIS OF SLEDGE REACTION FORCES DURING CYCLICAL LOADING OF THE TRICEPS SURAE

Laura-Anne M. Furlong, Andrew J. Harrison

P9.3 - ID 476

COMPARISON OF BALLISTIC AND NON-BALLISTIC LOWER-BODY RESISTANCE EXERCISE PERFORMANCE. METHODS TO DETERMINE THE POSITIVE LIFTING PHASE

Jason Lake, Mike Lauder, Neal Smith

P9.4 - ID 475

BARBELL KINEMATICS SHOULD NOT BE USED TO ESTIMATE BARBELL AND BODY SYSTEM CENTRE OF MASS POWER IN THE BACK SQUAT

Jason Lake, Mike Lauder, Neal Smith

P9.5 - ID 161 (NIA)

CALCULATING CENTRE OF PRESSURE FROM MULTIPLE FORCE PLATES FOR KINETIC ANALYSES OF SPRINT RUNNING

Timothy Exell, David Kerwin, Gareth Irwin, Marianne Gittoes

P9.6 - ID 166

CONTACT TIME, JUMP HEIGHT, AND REACTIVE STRENGTH INDEX DURING DROP JUMPS IN WATER, ON PADDED AND NONPADDED CONDITIONS

Mitchell L. Stephenson, William P. Ebben, Eamonn P. Flanagan, Randall L. Jensen

P9.7 - ID 176

RECONSTRUCTION ERROR OF CALIBRATION VOLUME'S COORDINATES FOR 3D SWIMMING KINEMATICS

Pedro Figueiredo, João Paulo Vilas-Boas, Ricardo J Fernandes

P9.8 - ID 445

RELIABILITY OF ELECTROMAGNETIC TRACKING IN DESCRIBING PITCHING MECHANICS

David W Keeley, Gretchen D Oliver, Christopher P Dougherty, Michael R Torry

P9.9 - ID 479 (NIA)

REARFOOT ANGLE VELOCITIES DURING RUNNING - A COMPARISON BETWEEN OPTOELECTRONIC AND GYROSCOPIC MOTION ANALYSIS

Pavle Lederer, Reinhard Blickhan, Heiko Schlarb

P9.10 - ID 393

RELATIVE JOINT MOMENT CONTRIBUTION TO THE POWER GENERATED IN A MARTIAL ARTS KICK – INFLUENCE OF SKILL LEVEL

Silvia Cabral, António P Veloso, Vera Moniz-Pereira

Poster Session 10 (Biomechanical Modelling and Simulation)

P10.1 - ID 483

EFFECT OF SEAT TUBE ANGLE ON THE WORK EFFICIENCY OF LOWER LIMB MUSCLES DURING CYCLING

Kyung Ryul Chung, Joon Ho Hyeong, Sa yup Kim, Chun Ho Choi

P10.2 - ID 460

CHANGES IN LEG COMPLIANCE DURING HOPPING TO EXHAUSTION

Wangdo Kim, Filipa João, António Veloso, Arkady S. Voloshin

P10.3 - ID 472

EFFECTS OF LOWER BODY COMPRESSION GARMENT IN MUSCLE OSCILLATION AND TISSULAR INJURY DURING INTENSE EXERCISE.

Xantal Borràs, Xavier Balius, Francheck Drobnic, Lluís Til, Antonio Turmo, Javier Valle

P10.4 - ID 528 (NIA)

CO-CONTRACTION OF TIBIALIS ANTERIOR AND SOLEUS MUSCLES DURING EXERCISES WITH DIFFERENT CONDITIONS OF INSTABILITY

Jomilto Praxedes, Gustavo Leporace, Sergio Pinto, Glauber Pereira, Araildo Silva, Luiz Alberto Batista

P10.5 - ID 37

CENTRAL AND PERIPHERAL FATIGUE IN WOMEN ATHLETES

Heidi Orloff, Allison Craven, Fiona Gornick

P10.6 - ID 505

COMPARISON OF VISCOELASTIC STRESS RELAXATION RESPONSE BETWEEN FLEXIBLE AND INFLEXIBLE INDIVIDUALS

Christian E.T. Cabido, Hans-Joachim Menzel, Fabrício Anício Magalhães, Beatriz Magalhães Pereira, Gustavo H. C. Peixoto, Pedro Frederico Valadão, Antonio Eustáquio Melo Pertence, Mauro Heleno Chagas

P10.7 - ID 495

KINETIC PARAMETERS DETERMINANTS OF PERFORMANCE IN COUNTER MOVEMENT JUMP

Juliano Dal Pupo, Daniele Detanico, Saray Giovana dos Santos

P10.8 - ID329

RELATIONSHIP BETWEEN LEG DOMINANCE TESTS AND TYPE OF TASK

Jessica Velotta, Josh Weyer, Amanda Ramirez, Jamila Winstead, Rafael Bahamonde

P10.9 - ID490

KINETIC PROFILE AND INCIDENCE OF INJURIES AMONG HIGH PERFORMANCE TRAMPOLINE GYMNASTS

S. M. Kuisis, T.C. Camacho, S. M. Dafel, D. C. Janse van Rensburg

30.06.2011 13:00

Faculty Restaurant & Sports areas (Super Bock Lounge)

Lunch & Animated Sports Activities (Ball-room & Salsa Dance)

30.06.2011 14:30

Auditorium

Conference 6

Bruce Elliot

THE PLAYER DEVELOPMENT PATHWAY: A BIOMECHANICAL PERSPECTIVE

Chairperson: Timothy R. Ackland

30.06.2011 15:30

Auditorium

Oral Session 14 (Biomechanics of Gait and Running)

Chairperson: Ronaldo Gabriel

ID409

ANGULAR KINEMATICS AND JOINT MOMENTS ANALYSIS IN LOWER LIMB AND PELVIS DURING GAIT IN SAGITTAL PLANE IN PREGNANT WOMEN

Liliana Aguiar, Rita Santos-Rocha, Marco Branco, Filomena Vieira, Filipa João, Filomena Carnide, António P. Veloso

ID572

LOCOMOTOR RESPIRATORY COUPLING STRATEGIES DURING WALKING

Joseph O'Halloran, Joseph Hamill, William McDermott, Jebb Remelius, Richard EA van Emmerik

ID510 (NIA)

USING INDUCED ACCELERATIONS TO ANALYZE GAIT IN THE ELDERLY

Vera Moniz-Pereira, Silvia Cabral, Filomena Carnide, António P. Veloso

ID 394 (NIA)

THE INFLUENCE OF DIFFERENT SPEEDS ON BACKPACKER'S GAIT KINETICS

Marcelo Castro, Sofia Abreu, Helena Sousa, Cristina Figueiredo, Leandro Machado, Rubim Santos, João Paulo Vilas-Boas

ID566

INVESTIGATION OF THE MOMENT OF INERTIA AND THE BIOMECHANICAL INTERNAL FORCES ACTING ON THE KNEE DURING HIKING

Jared Jun Yong Toh, Liao Kin, Wei Xie

ID506

A COMPARISON OF THE BILATERAL, DYNAMIC Q-ANGLE IN FEMALES

Andrea Melicharek, Marilyn K. Miller, Joseph Hazzard

30.06.2011 15:30

Room 1

Oral Session 15 (Miscellaneous)

Chairperson: Margarida Espanha

ID290

VERTICAL BREAST EXTENSION DURING TREADMILL RUNNING

Joanna Scurr, Jennifer White, Alexandra Milligan, Debbie Risius, Wendy Hedger

ID392

EFFECT OF LOWER BODY COMPRESSION GARMENT IN RUNNING MECHANICS

Xantal Borràs, Xavier Balius, Franchek Drobnic

ID61 (NIA)

THE RELATIONSHIP BETWEEN SHOULDER COUNTER-ROTATION AND LUMBAR MECHANICS DURING FAST BOWLING

Helen Crewe, Amity Campbell, Bruce Elliott, Jacqueline Alderson

ID597 (NIA)

SPORTS-RELATED ORO-FACIAL INJURIES: WHICH KIND OF MOUTHGUARD WILL BE THE MOST SUITABLE TO PLAY SAFE?

M. Clemente, A. Silva, A. Sousa, J. Gabriel, J. Pinho

ID146

THE COUPLING BETWEEN PRONATION AND TIBIAL INTERNAL ROTATION IS DIFFERENT IN RUNNER'S WITH ANTERIOR KNEE PAIN

Pedro Rodrigues, Trampas TenBroek, Richard van Emmerick, Joseph Hamill

ID25

ANKLE LIGAMENT STRAIN DURING SUPINATION SPRAIN INJURY – A COMPUTATIONAL BIOMECHANICS STUDY

Daniel Tik-Pui Fong, Feng Wei, Youlian Hong, Tron Krosshaug, Roger C. Haut, Kai-Ming Chan

30.06.2011 15:30

Room 9

Applied Session: SWIMMING BIOPHYSICS

Chairperson: Ricardo Fernandes

FROM TECHNICAL FOUNDATIONS TO INCREASED EFFICIENCY IN SWIMMING

Ross Sanders

ASSESSING GROSS EFFICIENCY AND PROPULSIVE EFFICIENCY IN SWIMMING

Paola Zamparo

TRANSFERRING APPLIED HYDRODYNAMICS TO TECHNICAL TRAINING

Raul Arellano

EVALUATION AND FEEDBACK IN SWIMMING: HISTORICAL OVERVIEW

Bruce Mason

30.06.2011 17:00

Exhibition Hall

Coffee-break

30.06.2011 17:30

Auditorium

Oral Session 16 (Biomechanics of Team Sports)

Chairperson: Xavier Balias

ID539

INTRAINDIVUAL VARIABILITY OF THE MOVEMENT PATTERNS IN EXPERT HANDBALL THROWERS

Javier Rojas, Marcos Gutiérrez, Manuel Ortega, Juan Párraga, José Campos

ID 554

EFFECT OF TRAINING ON THE KINEMATICS AND PERFORMANCE IN OVERARM THROWING IN EXPERIENCED FEMALE HANDBALL PLAYERS

Roland van den Tillaar, Mario Marques

ID434

LOADS ACTING ON THE LOCOMOTIVE SYSTEM OF PROFESSIONAL FEMALE VOLLEYBALL PLAYERS DURING THE LANDING PHASE OF SPIKES AND BLOCKS

J. Kabacinski, L.B. Dworak, K. Kmiecik, M. Murawa, J. Maczynski

ID588

HUMERAL RETROVERSION IN OVERHEAD THROWING ATHLETES

Andrea Ribeiro, Augusto Gil Pascoal, Pedro Miguel Ribeiro

ID557

BETTER POSTURAL CONTROL DURING ACCURATE SHOOTING IN ELITE FEMALE BASKETBALL PLAYERS

Yen-Ting Wang, Tsung-Li Tseng, Lin Chi, Chen-fu Huang, Pao-Cheng Lin, Alex J.Y. Lee

ID 152

REAL-TIME SQUATTING SYMMETRY TRAINING USING NINTENDO Wii BALANCE BOARDS

Rian McGough, Kade Paterson, Elizabeth Bradshaw, Adam Bryant, Ross Clark

30.06.2011 17:30

Room 1

Oral Session 17 (Biomechanics of Individual and Adapted Sports)

Chairperson: Wolfgang Potthast

ID439

SPORT INFLUENCE ON FOOTPRINTS OF COLOMBIAN'S POWERLIFTERS, SWIMMERS AND FIELD ATHLETES

Gómez Lessby, Franco Juan Manuel, Nathy Jhon Jairo, Valencia Edwin, Vargas Diana

ID585

IS THE LOCAL MINIMUM IN THE FORCE TIME HISTORY IN COUNTER-MOVEMENT JUMPS RELATED TO JUMP PERFORMANCE?

Gunther Kurz, Christian Stockinger, Anne Richter, Wolfgang Potthast

ID391

KINETICS OF SPRINT CYCLING WITH A BELOW-KNEE PROSTHETIC LIMB: A CASE STUDY OF A PARALYMPIC CHAMPION

Paul Barratt

ID556

SHOT PUT KINEMATICS OF WORLD CLASS ATHLETES WITH AN INTELLECTUAL DISABILITY

Steffen Willwacher, Wolfgang Potthast, Ralf Müller, Gert-Peter Brüggemann

ID241 (NIA)

CHEST WALL KINEMATICS OF ATHLETES WITH TETRAPLEGIA

Juliana Viana Paris, Karine Jacon Sarro, Marlene Moreno, Amanda Piaia Silvatti, Ricardo M. L. Barros

ID522 (NIA)

THE MOMENT OF THE HIP AND KNEE IN OBESE AND NON-OBESE INDIVIDUALS DURING STAIR ASCENT AND DESCENT

Nok-Hin Law, Jing Xian Li, Nok-Yeung Law

30.06.2011 17:30

Room 9

Oral Session 18 (Miscellaneous)

Chairperson: Elisabeth Bradshaw

ID459

INTER-DAY RELIABILITY LEG, KNEE AND ANKLE STIFFNESS MEASURES DURING HOPPING

Corey Joseph, Elisabeth Bradshaw, Ross Clark

ID553

ISOKINETIC LEG STRENGTH CHANGES IN YOUNG FEMALE SOUTH AFRICAN RECRUITS
FOLLOWING BASIC MILITARY TRAINING

Paola Wood, Pieter Krüger, Aurélio Faria

ID402

FIRST SECTION OF THE COURSE PERFORMANCE AS A CRITICAL ASPECT IN SKICROSS
COMPETITION: 2010 OLYMPIC GAMES & WORLD CUP ANALYSIS

Javier Argüelles, Blanca De la Fuente, Jacek Tarnas, Rocio Dominguez-Castells

ID519 (NIA)

ESTIMATION OF GROUND REACTION FORCES DURING WALKING

Isamu Nishida, D. Gordon E. Robertson, Masato Maeda, Tsuneo Kawano, Keiichi Shirase

ID291

ESTIMATE OF TEMPORAL PARAMETERS DURING SPRINT RUNNING BY TRUNK INERTIAL
SENSING: IN FIELD VALIDATION

E. Bergamini, P. Picerno, V. Camomilla, H. Pillet, A. Cappozzo

ID158

EFFECTS OF PILATES TRAINING ON MUSCULAR STRENGTH AND BALANCE IN BALLET
DANCERS

Tânia Amorim, Filipa Sousa, Leandro Machado, José Augusto Santos

30.06.2011 17:30

Swimming pool

Applied Session: SWIMMING BIOPHYSICS

Chairperson: Francisco Alves

MAD SYSTEM FOR THE ASSESSMENT OF ACTIVE DRAG AND PROPULSIVE EFFICIENCY

Huub Toussaint

MEASURING ENERGY EXPENDITURE IN SWIMMING TO ASSESS GROSS MECHANICAL
EFFICIENCY

Carlo Baldari, Laura Guidetti & Marco Meucci



ASSESSING MUSCULAR AND SWIMMING POWER

Raul Arellano & Rocío Domínguez-Castells

SWIMMING BIOPHYSICAL RELEVANT PARAMETERS EXTRACTED FROM VELOCIMETRY AND
ACCELEROMETRY

J. Paulo Vilas-Boas, Leandro Machado, Susana Soares, Ricardo Fernandes, Antônio B. Lima &
Miguel Velhote Correia:

QUALISYS Demonstration



30.06.2011 19:00

Super Bock Lounge

Happy-hour – Acrobatic Gymnastics – Flyers (Faculty of Sport)

30.06.2011 20:00

Bus Shuttle to Hotels

01.07.2011 08:30

Bus Shuttle from Hotels

01.07.2011 09:00

Auditorium

Conference 7

Paavo Komi

IDENTIFICATION OF STRETCH-SHORTENING CYCLES (SSC) IN DIFFERENT SPORTS

Chairperson: Filipa Sousa & Pedro Mil-Homens

01.07.2011 10:00

Auditorium

Oral Session 19 (Teaching Biomechanics and Development Biomechanics)

Chairperson: Duane Knudson

ID462

FOURTH NORTH AMERICAN SURVEY OF UNDERGRADUATE BIOMECHANICS INSTRUCTION IN KINESIOLOGY/EXERCISE SCIENCE

Luke R. Garceau, Duane V. Knudson, William P. Ebben

ID471

APPLICATION OF BIOMECHANICAL CONCEPTS IN PROFESSIONAL LIFE OF PHYSICAL EDUCATION TEACHER

Ana Paula X. Ladeira, Sônia C. Corrêa, Igor R. Dias, Elisabete dos S. Freire

ID463

DEVELOPMENT OF THE OVERARM THROWING MOTION FOR JAPANESE ELEMENTARY SCHOOL GIRLS

Yasuto Kobayashi, Michiyoshi Ae, Akiyo Miyazaki, Norihisa Fujii

ID416

AGE BASED MECHANICS OF MAXIMAL JUMP PERFORMANCE IN ENDURANCE ATHLETES

Ceri Diss, Marianne Gittoes, Richard Tong, David Kerwin

ID442

WHEN IS THE BACKWARD WALK STARTING AGE FOR CHILDREN?

Kohtaroh Hagio, Hiroh Yamanoto

ID427

INFLUENCE OF THE RANGE OF MOTION ON JUMPING HEIGHT IN CHILDHOOD

Pablo Floria, Andrew J. Harrison

01.07.2011 10:00

Room 1

Oral Session 20 (Miscellaneous)

Chairperson: Randall Jensen

ID 390

CENTRE OF MASS MOTION DURING THE PUNT KICK

Kevin Ball

ID586

KINEMATIC AND COORDINATION VARIABILITY OF THE THROWING ARM DURING THE WATER POLO SHOT

Paul Taylor, Raul Landeo, Jennifer Coogan

ID573

THE INFLUENCE OF EXPERIENCE ON KINETIC CHARACTERISTICS OF THE LOOPED LONGSWING

Genevieve Williams, Gareth Irwin, David G. Kerwin, Karl M. Newell

ID447

THE CHARACTERISTICS OF LOWER LIMB MOMENTS IN BASEBALL PITCHING

Chen-Fu Huang, Chun-Lung Lin

ID446

EXAMINATION OF ACUTE WHOLE-BODY VIBRATION ON MAXIMAL VERTICAL JUMP HEIGHT IN COLLEGIATE VOLLEYBALL ATHLETES

Sarah Hilgers, Bryan Christensen

ID516

EFFECTS OF WHOLE BODY VIBRATION TRAINING ON KNEE EXTENSOR MUSCLE STRENGTH AND RATE OF FORCE DEVELOPMENT

Yu-Ju Kuo, Yu-Ming Lee, Kuo-Hui Cheng, Ching-Feng Cheng, Heng-Ju Lee

01.07.2011 10:00

Room 9

Oral Session 21 (Biomechanics of Individual Sports)

Chairperson: J. Xian Li

ID424

KINEMATICAL ANALYSIS OF FIVE DIFFERENT KICKS IN TAEKWONDO

Coral Falco, Isaac Estevan, Manfred Vieten

ID448

MECHANICAL ANALYSIS OF THE ROUNDHOUSE KICK ACCORDING TO THE STANCE POSITION: A PILOT STUDY

Isaac Estevan, Coral Falco, Daniel Jandacka

ID524

KINEMATICAL ANALYSIS OF BANDAL AND DOLYO TAEKWONDO KICKS OF A HIGH LEVEL FEMALE ATHLETE

Jerusa P.R. Lara, Afonsa Janaina da Silva, Milton S. Misuta, Amanda P. Silvatti, Luciano A. Mercadante, Ricardo M. L. Barros

ID535

THE IMPACT OF DETRAINING ON PERFORMANCE AND SOME OF THE BIOMECHANICAL VARIABLES IN TAEKWONDO

Hashem A. Kilani, Waleed S. Nasser

ID559

KINEMATIC ANALYSIS OF THE SUPPORTING LEG BETWEEN DIFFERENT WEIGHT DIVISIONS IN THE ROUNDHOUSE KICK OF TAEKWONDO

Ying-Xun Wang, Shih-Yu Kuo, Ling-Hua Wang, Kuangyou B. Cheng

ID541

HOW TOUGH IS IT TO REPEATEDLY HIT THE BALL IN GOLF?

Gongbing Shan, Xiang Zhang

01.07.2011 11:30

Exhibition Hall

Coffee-break

01.07.2011 12:00

Exhibition Hall

Poster Sessions 11 to 13

Poster Session 11 (Biomechanical Instrumentation & Evaluation Methods)

P11.1 - ID488

CONSTRUCTION AND CALIBRATION OF A LOW-COST FORCE PLATE FOR HUMAN BALANCE EVALUATION

Raphaella Alvarenga, Flávia Porto, Ricardo Braga, Rebecca Cantreva, Gabriel Espinosa, Alex Itaborahy, Pedro Paulo Soares, Jonas Gurgel

P11.2 - ID 533

NEW SOFTWARE FOR THE IDENTIFICATION OF INDIVIDUALIZED RESPONSES TO PHYSICAL TESTS IN LARGE GROUPS OF SUBJECTS

Rafael Alkmin Reis, Denise Vaz de Macedo, René Brenzikofer

P11.3 - ID 538

RELATIVE ERROR ANALYSIS DURING REPRODUCTION OF ISOMETRIC FORCE OF KNEE EXTENSORS IN YOUNG ADULTS

Bruno M Espindola, Caroline Ruschel, Heiliane B Fontana, Daniela P dos Santos, Marcos A Noronha, Alessandro Haupenthal

P11.4 - ID 504

COMPARISON OF TWO METHODS TO CALCULATE PASSIVE MUSCLE STIFFNESS IN HUMAN

Gustavo H. C. Peixoto, Hans Joachim Menzel, Fabrício Anício Magalhães, Beatriz Magalhães Pereira, Antonio Eustáquio Melo Pertence, Ricardo Luiz Carneiro, Mauro Heleno Chagas

P11.5 - ID 547

A DYNAMOMETRIC METHOD FOR THE EVALUATION OF HIKING IN LASER BOATS

Gustavo R Schütz, Alessandro Haupenthal, Caroline Ruschel, Heiliane B Fontana, Marcel Hubert, Suzana M Pereira, Helio Roesler

P11.6 - ID 411

VALIDATION WITH VIDEOMETRY OF AN INTEGRATED SYSTEM TO ASSESS HORIZONTAL INTRA-CYCLIC VELOCITY WITH A MECHANICAL SPEEDO-METER

Tiago M Barbosa, Mário J Costa, Jorge E Morais, Sérgio Jesus, António J Silva, José Batista, José Gonçalves

P11.7 - ID 418

ASSESSING TENNIS PLAYER INTERACTIONS WITH TENNIS COURTS

Marcus Dunn, Simon Goodwill, Jon Wheat, Steve Haake

P11.8 - ID 456

WALKINSENSE VALIDATION: PRELIMINARY TESTS OF MOBILITY PARAMETERS

Marcelo Castro, Sofia Abreu, Isabel Fonseca, João Neiva, Miguel V. Correia, J. P. Vilas-Boas

P11.9 - ID 455

THE EFFECTS OF WEARING SPANDEX GARMENT WITH COMPRESSION BAND ON KINEMATIC VARIABLES DURING A GOLF SWING

Chang-soo Yang, Ho-youll Kang, Gye-san Lee, Young-tae Lim, Seong-jung Kim, Woen-sik Chae, Min-soo Kim, Dong-soo Kim, Nyeon-ju Kang

P11.10 - ID 468

EFFECT OF KINESIO TAPING ON PERFORMANCE IN COUNTER-MOVEMENT JUMP

Jakob Kümmel, Danica Mauz, Florian Blab, Manfred Vieten

Poster Session 12 (Biomechanics of Individual Sports)

P12.1 - ID 532

COMPARISON OF KINEMATIC CHARACTERISTICS BETWEEN STANDING AND ROTATIONAL DISCUS THROWS

Oleg Nemtsev

P12.2 - ID 258

EFFECT OF PERFORMANCE SPEED ON THE KINEMATICS AND KINETICS OF TWO TRUNK AND HIP STRENGTHENING EXERCISES

José L.L. Elvira, David Barbado, Belén Flores-Parodi, Francisco J. Vera-García

P12.3 - ID 296

A METHOD TO QUANTIFY MOVEMENT VARIABILITY OF HIGHLY SKILLED GOLFERS PERFORMING DRIVER SWINGS

Catherine B. Tucker, Ross Anderson, Ian C. Kenny

P12.4 - ID 406

EFFECTS OF TRYING TO GAIN DISTANCE ON GOLF DRIVING TECHNIQUE

Steven J. Buzza, Gareth Irwin, Ian N. Bezodis, David G. Kerwin, Young-Hoo Kwon

P12.5 - ID 591

COMPARATIVE BIOMECHANICS ANALYSIS OF HURDLE CLEARANCE TECHNIQUES

Xi Li, Jihe Zhou, Ning li, Jing Wang

P12.6 - ID 499

COMPARISON OF PLAYER'S CENTER OF MASS MOVEMENT BETWEEN HIGH AND LOW IMPACT POSITIONS IN TENNIS FOREHAND STROKE

Chih-Yu Lin, Kuo-Cheng Lo, Hwai-Ting Lin, Lin-Hwa Wang

P12.7 - ID464

KINEMATICS OF FOOT-SHANK COMPLEX IN "KENDO" AND ITS RELATIONSHIP WITH FOOT ARCH HEIGHT

Sentaro Koshida, Tadamitsu Matsuda, Kyohei Kawada

P12.8 - ID 565

STEP ADJUSTMENT IN LONG JUMP APPROACH IN BEGINNER ATHLETES AGED 12-13

Flora Panteli, Apostolos Theodorou, Athanasia Smirniotou

P12.9 - ID423

ANALYSIS OF HALF-SQUAT MECHANICAL SPECIFICITY TO TRACK AND FIELD THROWING TECHNIQUES

Henrique Coimbra, Mário Vaz, Nuno Ramos, Juvenal Fernandes, João Carvalho, Filipe Conceição

P12.10 - ID 567

A BIOMECHANICAL STUDY OF THE TAKEOFF PREPARATION AND THE TAKEOFF MOTIONS IN ELITE MALE LONG JUMPERS

Yutaka Shimizu, Michiyoshi Ae, Hiroyuki Koyama

Poster Session 13 (Biomechanics of Team Sports)

P13.1 - ID 18

THE EXAMINATION OF BALL FIELD PLACEMENT IN SLO-PITCH HITTING

Tom Wu, Pierre Gervais, Pierre Baudin, Marcel Bouffard

P13.2 - ID 413

COMPARISON OF TORSO TWIST BETWEEN SLAP HIT AND ORDINARY HIT IN SOFTBALL BATTING

Yi-Wen Chang, Hsiu-Mei Hsieh, Shien-Ming Yang, Feng-Yin Chen, Hua-Wei Lin, Hong-Wen Wu

P13.3 - ID 593

STUDY ON KNEE JOINT ISOKINETIC STRENGTH OF MALE VOLLEYBALL PLAYERS

WeiPing Shu, JiHe Zhou

P13.4 - ID 526

ASYMMETRIES BETWEEN LOWER LIMBS DURING JUMPING IN FEMALE ELITE ATHLETES FROM THE BRAZILIAN NATIONAL VOLLEYBALL TEAM

Raquel Castanharo, Maria Isabel Veras Orselli, Cristina Alcantara, Andréia Miana, Edison de Jesus Manoel, José Elias Proença, Marcos Duarte

P13.5 - ID 340

CENTRE OF MASS INTRACYCLIC VELOCITY VARIATION IN THREE VARIANTS OF THE FRONT CRAWL WATER POLO TECHNIQUE

Filipa Pereira, Pedro Figueiredo, Pedro Gonçalves, João Paulo Vilas-Boas, Ricardo J. Fernandes, Leandro Machado

P13.6 - ID 376

KINEANTROPOMETRIC PROFILE OF PORTUGUESE WATER POLO PLAYERS

Sofia Canossa, João F Martins, Pedro Figueiredo, Ricardo J Fernandes, Francisco M Argudo, Júlio M Garganta

P13.7 - ID 414

THROWING VELOCITY IN ELITE WATER POLO FROM DIFFERENT AREAS OF THE SWIMMING POOL

J. Arturo Abrales, Carmen Ferragut, Nuria Rodríguez, Pedro E. Alcaraz, Helena Vila

P13.8 - ID 104

EFFECTS OF EXTERNAL LOADING ON POWER OUTPUT DURING VERTICAL JUMPS: A COMPARISON BETWEEN WATER POLO AND VOLLEYBALL PLAYERS

Sônia C. Corrêa, Ana Paula X. Ladeira, Rosangela G. Romano, Gilberto Guimarães

P13.9 - ID 560

THE ANALYSIS OF RACE PACING IN ELITE COMPETITIVE LONG-DISTANCE SPEED SKATING

Shunsuke Takenaka, Masahiro Yuki, Norihisa Fujii

P13.10 - ID 311

ANALYSIS OF SINGLE AND TEAM KAYAK ACCELERATION

Beatriz Gomes, Nuno Viriato, Ross Sanders, Filipe Conceição, Mário Vaz, João Paulo Vilas-Boas

01.07.2011 13:00

**Faculty Restaurant & Sports areas (Swimming pool)
Lunch & Animated Sports Activities (Hydro-gymnastics)**

01.07.2011 14:30

Auditorium

Conference 8

2010 HG-NIA winner

Anne Richter

SPECIFIC ISSUES OF VERTICAL JUMPS AS FUNDAMENTAL PERFORMANCE DIAGNOSTICS
TOOLS

THE HANS GROS NEW INVESTIGATOR AWARD FINALISTS 2011

Chairperson: Gareth Irwin

01.07.2011 16:15

Exhibition Hall

Coffee-break

01.07.2011 16:45

Auditorium

ISBS Annual General Meeting

01.07.2011 18:00

Super Bock Lounge

Happy-hour – Academic “Tuna Songs”

01.07.2011 19:00

Bus Shuttle to Hotels

01.07.2011 20:00

Bus Shuttle from Hotels to Closing Banquet

01.07.2011 21:00

Closing Banquet – São Bento da Vitória Monastery

01.07.2011 24:00

Bus Shuttle to Hotels