

### **Parallel Sessions Programme**

This programme includes all the parallel sessions programmed for the ISBS2011 Session's Rooms (Auditorium and Rooms 1 and 9). It includes Oral Sessions of short presentations and Applied Sessions. The detailed programmes of the Applied Sessions are object of separated documents for each one. In this document, consequently, delegates can only find reference to the date, hour and Room for each Applied Session.

Authors are encouraged to follow organization instructions regarding previous e-mail sending of presentation files. Until two sessions before the actual presentation session, authors should visit the "Authors Ready Room" to verify their presentation. Finally the presenting author should attend the presentation room 5 min prior the scheduled hour for the beginning of the session and present her/himself to the Chairperson. Each presentation (with discussion) can't last more than 13 min, allowing 2 min for transition of presenting authors. Please prepare your presentations for not much more than 10 min of duration. Authors and chairpersons are strongly asked to respect schedule.

**28.06.2011 10:00**

**Auditorium**

**Oral Session 1 (Biomechanics of Individual Sports - Swimming)**

**Chairperson:**

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, Vishveshwar 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:**

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:**

---

**28.06.2011 15:30**

**Auditorium**

**Oral Session 3 (Electromyography applied to Sports Biomechanics)**

**Chairperson:**

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-young 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:**

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:**

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 17:30**

**Auditorium**

**Oral Session 6 (Biomechanics of Injuries and Treatment)**

**Chairperson:**

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:**

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<sup>a</sup> 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:**

**29.06.2011 10:00**

**Auditorium**

**Oral Session 8 (Biomechanical Modelling and Simulation)**

**Chairperson:**

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 Schüler, 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:**

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:**

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 VERTICAL 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

**30.06.2011 10:00**

**Auditorium**

**Oral Session 11 (Biomechanics of Muscles and Connective Tissue)**

**Chairperson:**

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:**

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:**

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 15:30**

**Auditorium**

**Oral Session 14 (Biomechanics of Gait and Running)**

**Chairperson:**

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:**

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:**

---

**30.06.2011 17:30**

**Auditorium**

**Oral Session 16 (Biomechanics of Team Sports)**

**Chairperson:**

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:**

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:**

ID459

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

Corey Joseph, Elizabeth 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

**01.07.2011 10:00**

**Auditorium**

**Oral Session 19 (Teaching Biomechanics and Development Biomechanics)**

**Chairperson:**

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 Yamamoto

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:**

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:**

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