

**POSTER SESSION A, Wednesday June 26 (16:30-18:00)**

**A1. Perception of affordances for receiving serves in virtual volleyball: Higher order affordances in real time**

*Danilo G. Arruda<sup>1</sup>, Jeffrey B. Wagman<sup>2</sup> & Thomas A. Stoffregen<sup>1</sup>*

<sup>1</sup>*University of Minnesota, USA*

<sup>2</sup>*Illinois State University, USA*

**A2. From exploration to information detection: The effects of practice conditions on task performance while using a sensory substitution device**

*Saroosh Bilal<sup>1</sup>, Raoul M. Bongers<sup>2</sup>, David M. Jacobs<sup>1</sup>*

<sup>1</sup>*Autonomous University of Madrid, Spain*

<sup>2</sup>*University Medical Center Groningen, The Netherlands*

**A3. Unfamiliar environments and the use of electronic aids by visually impaired individuals: A qualitative study**

*Saroosh Bilal<sup>1</sup>, Jorge Rebate<sup>2</sup>, Veronica Sevillano<sup>1</sup>, David M. Jacobs<sup>1</sup>*

<sup>1</sup>*Autonomous University of Madrid, Spain*

<sup>2</sup>*Once Foundation in Madrid, Spain*

**A4. Predicting repetitive worker behaviour using eye-gaze**

*Erik Billing<sup>1</sup>, Anna Brolin<sup>1</sup>, Raquel Quesada Díaz<sup>1</sup>, Malin Eklund<sup>1</sup>, Dan Lämkuill<sup>1,2</sup>*

<sup>1</sup>*University of Skövde, Sweden*

<sup>2</sup>*Volvo Car Corporation in Gothenburg, Sweden*

**A5. Basketball teams as complex adaptive systems: A temporal network analysis of collective behavior and performance**

*Quentin Bourgeois<sup>1</sup>, Rodolphe Charrier<sup>2</sup>, Eric Sanlaville<sup>2</sup>, Ludovic Seifert<sup>1</sup>*

<sup>1</sup>*University of Rouen Normandy, France*

<sup>2</sup>*Normandy University Le Havre, France*

**A6. Integer ratio biases in rhythm reproduction are predicted by neural oscillation and hebbian learning**

*Hayes Brenner, Edward Large, Ji Chul Kim*

*University of Connecticut, USA*

**A7. Differences in practice effects between geometric and dynamic affordances in a reaching task**

*Giacomo Bressanello, Naomi Schreurs, Raoul M. Bongers, Joanne Smith*

*University Medical Center Groningen, University of Groningen, The Netherlands*

**A8. Striking a balance: The role of baseline postural differences and noise type in noise-based stimulation effects**

*Nicole S. Carver, Scott G. Fasone, Paula L. Silva*

*University of Cincinnati, USA*

**A9. A ball-and-board game based on coordination for re-learning postural stability in ACL rehabilitation**

Anaëlle Cheillan<sup>1</sup>, David M. Jacobs<sup>2</sup>, João Milho<sup>3</sup>, Pedro Passos<sup>1</sup>

<sup>1</sup>*University of Lisbon, Portugal*

<sup>2</sup>*Autonomous University of Madrid, Spain*

<sup>3</sup>*Higher Institute of Engineering Lisbon, Polytechnic Institute Lisbon, Portugal*

**A10. Modelling the continuous jab and cross combinations of boxing as nonlinear oscillators**

*Szu-Hong Cheng, Yeou-Teh Liu*

*National Taiwan Normal University in Taipei, Taiwan*

**A11. Me against the world: Influences of actor vs. environment variation on affordance-guided behavior**

*Dalton S. Cooper, Emily Wang, Dominic Bley, Tehran J. Davis*

*University of Cincinnati, USA*

**A12. What makes a ball interceptable? Examining the affordance of interceptability for oneself**

*Samruddhi Damle<sup>1</sup>, Reinoud Bootsma<sup>2</sup>, Frank Zaal<sup>1</sup>*

<sup>1</sup>*University Medical Center Groningen, The Netherlands*

<sup>2</sup>*Aix-Marseille University, France*

**A13. Object identification with a minimal sensory substitution glove**

*Carlos de Paz<sup>1</sup>, David Travieso<sup>1</sup>, Manuel Heras-Escribano<sup>2</sup>, Lorena Lobo<sup>3</sup>*

<sup>1</sup>*Autonomous University of Madrid, Spain*

<sup>2</sup>*University of Granada, Spain*

<sup>3</sup>*Madrid Open University (UDIMA), Spain*

**A14. Perceptual learning of feelies is influenced by viewpoint, motion, and affordance priming**

*Catherine Dowell<sup>1</sup>, McKenzie Gunter<sup>2</sup>, Alen Hajnal<sup>2</sup>*

<sup>1</sup>*University of Southern Indiana, USA*

<sup>2</sup>*University of Southern Mississippi, USA*

**A15. Affordances: A knowledge representation towards human-robot interaction**

*Bastien Dussard, Guillaume Sarthou, Aurélie Clodic*

*University of Toulouse, France*

**A16. Development of audio-visual «looming» perception in infants receiving extra motor stimulation and full-term controls: A longitudinal high-density electroencephalography study**

*Anne Kristine Eggen, Audrey van der Meer, Silje-Adelen Nenseth*

*Norwegian University of Science and Technology (NTNU) in Trondheim, Norway*

**A17. Local navigation strategies guide global route selection**

*Cassandra Engstrom, William H. Warren*

*Brown University in Rhode Island, USA*

**A18. Learning to produce challenging multi frequency coordination patterns with transformed visual feedback**

*Spencer Ferris, Steven Masi, Steven J. Harrison  
University of Connecticut, USA*

**A19. Haptic perception in children with Down syndrome: The perception of rods' length and usefulness**

*Sergio T. Fonseca, Juliana M. Ocarino, Marisa C. Mancini  
Federal University of Minas Gerais, Brazil*

**A20. Effect of wearing tensegrity-organized elastic bands on postural control in children with Down syndrome**

*Sergio T. Fonseca<sup>1</sup>, Clarissa C. Paz<sup>2</sup>, Thiago R. Santos<sup>3</sup>, Priscila Araújo<sup>1</sup>, Marisa C. Mancini<sup>1</sup>  
<sup>1</sup>Federal University of Minas Gerais, Brazil  
<sup>2</sup>University of Brasília, Brazil  
<sup>3</sup>Federal University of Uberlandia, Brazil*

**A21. Emergence and transition in the development of locomotion in Brazilian infants from 5 to 18 months old: A longitudinal study during the COVID Pandemic**

*Maylli Daiana Graciosa<sup>1</sup>, Edison de Jesus Manoel<sup>1</sup>, Ana Angelica Ribeiro de Lima<sup>1</sup>, Rene Drezner<sup>1</sup>, Priscilla A. Monteiro Ferronato<sup>2</sup>  
<sup>1</sup>School of Physical Education and Sport, University of Sao Paulo, Brazil  
<sup>2</sup>McGill University, Montreal, Canada*

**A22. An ecological approach to motor learning**

*Ran Zheng, John van der Kamp  
Free University of Amsterdam, The Netherlands*

**A23. Towards a framework of aesthetic and artistic sense-making: Threefold beauty**

*Lisa-Maria van Klaveren<sup>1</sup>, Gemma Schino<sup>1</sup>, Hector Gallegos González<sup>1</sup>, Theisje van Dorsten<sup>2</sup>, Barend van Heusden<sup>1</sup>, Ralf Cox<sup>1</sup>  
<sup>1</sup>University of Groningen, The Netherlands  
<sup>2</sup>University College Groningen, University of Groningen, The Netherlands*

**A25. Affordances for transgression: Theatre eco-niches allowing violations**

*LeGrace Benson  
State University of New York, USA*

**POSTER SESSION B**, Thursday June 27 (16:30-18:00)

**B1. Nested affordances in person-object systems: How body- and action-scaling interplay to support calibration in aperture crossing**

*Gisele C. Gotardi<sup>1</sup>, Matt Miller-Dicks<sup>2</sup>, Ludovic Seifert<sup>1</sup>*

<sup>1</sup>*University of Rouen Normandy, France*

<sup>2</sup>*University of Portsmouth, United Kingdom*

**B2. Contact surface curvature length specifies graspability**

*McKenzie L. Gunter, Myah Kelly, Alen Hajnal*

*University of Southern Mississippi, USA*

**B3. A unified account of current-future control & affordance-based control**

*Dees B. W. Postma<sup>1</sup>, Frank T. J. M. Zaal<sup>2</sup>*

<sup>1</sup>*University of Twente, The Netherlands*

<sup>2</sup>*University Medical Center Groningen, The Netherlands*

**B4. Quantum Mechanics in perception and action?**

*Robert Heath<sup>1</sup>, Thomas A. Stoffregen<sup>2</sup>*

<sup>1</sup>*Hiawatha Valley Education District, Minnesota, USA*

<sup>2</sup>*University of Minnesota, USA*

**B5. Audiovisual speech perception in children with ASD: Lessons from behavioral and neurobiological methods**

*Julia Irwin*

*Southern Connecticut State University, USA*

**B6. An intrinsic role of the human nose in postural control**

*Mariko Ito<sup>1</sup>, Takayuki Kondoh<sup>2</sup>, Hiroyuki Mishima<sup>2</sup>*

<sup>1</sup>*Sapporo Gakuin University, Japan*

<sup>2</sup>*Waseda University, Japan*

**B7. Do probing dynamics differ when perceiving different properties of the probe-surface system?**

*Arghya Kashyap<sup>1</sup>, Kwesi Blankson<sup>1</sup>, Alen Hajnal<sup>2</sup>, Jeffrey B. Wagman<sup>1</sup>*

<sup>1</sup>*Illinois State University, USA*

<sup>2</sup>*The University of Southern Mississippi, USA*

**B8. Analyzing whole-body coordination in perception-action system during slacklining**

*Kentaro Kodama<sup>1</sup>, Hideo Yamagiwa<sup>2</sup>, Yu Ozawa<sup>3</sup>, Kazuhiro Yasuda<sup>4</sup>*

<sup>1</sup>*Tokyo Metropolitan University, Japan*

<sup>2</sup>*Tokyo Metropolitan Tobu Medical Center, Japan*

<sup>3</sup>*Tokai University, Japan*

<sup>4</sup>*Waseda University, Japan*

**B9. First-order derivative of optic flow is helpful for direct perception of non-rigid motion but not for oculomotor pursuit**

*Krischan Koerfer, Markus Lappe  
University of Münster, Germany*

**B10. A longitudinal HD EEG study of perception of occluded moving objects in preterm and full-term infants and children**

*Ingrid B. Larsen, Audrey van der Meer, Silje-Adelen Nenseth  
Norwegian University of Science and Technology (NTNU) in Trondheim, Norway*

**B11. What does “ping pong” afford? - The role of acoustic cues in table tennis**

*Li-Yin Lin, Yeou-Teh Liu  
National Taiwan Normal University in Taipei, Taiwan*

**B12. Attentional constraints and the symmetry of discrete movement dynamics**

*Yeou-Teh Liu<sup>1</sup>, Karl M. Newell<sup>2</sup>  
<sup>1</sup>National Taiwan Normal University in Taipei, Taiwan  
<sup>2</sup>University of Georgia, USA*

**B13. Motivation to practice physical activity with an adaptive socially assistive robot in individuals with schizophrenia**

*J. Lozano-Goupil<sup>1</sup>, S. Raffard<sup>2</sup>, R. C. Schmidt<sup>3</sup>, L. Marin<sup>1</sup>, G. Mostafaoui<sup>4</sup>  
<sup>1</sup>University of Montpellier & IMT Mines Alès, France  
<sup>2</sup>University Hospital Center in Montpellier, France  
<sup>3</sup>College of the Holy Cross in Worcester, Massachusetts, USA  
<sup>4</sup>CY Cergy Paris University, France*

**B14. Moving with someone happy makes you happy**

*Juliette Lozano-Goupil, Mathilde Parisi, Benoit Bardy, Ludovic Marin  
University of Montpellier & IMT Mines Alès, France*

**B15. Fractal scaling of low-level perceptual variables in films and subjective aesthetic appraisals of viewers**

*Lucrezia Lucchi<sup>1</sup>, Lisa-Maria van Klaveren<sup>1,2</sup>, Julia J. C. Blau<sup>3</sup>, Ralf F. A. Cox<sup>1</sup>  
<sup>1</sup>University of Groningen (RUG), The Netherlands  
<sup>2</sup>Amsterdam University Medical Center, University of Amsterdam, The Netherlands  
<sup>3</sup>Central Connecticut State University, USA*

**B16. Tuned pendulums improve performance of a 1:2 coordination pattern task, but training with those pendulums may help or hinder performance in the task once the pendulums are removed**

*Steven Masi, Spencer Ferris, Steven Harrison  
University of Connecticut, USA*

**B17. Global contextual constraints influence affordance-based behavioral transitions in a virtual reality pass-through aperture task**

*Tarcisio S. Moreira, Dalton S. Cooper, Tehran Davis  
University of Cincinnati in Ohio, USA*

**B18. The effects of locomotor asymmetry on coordination and visual task performance**

*Charles Danee Napoli, Richard E. A. van Emmerik*

*University of Massachusetts in Amherst, USA*

**B19. Observation in everyday environments: Understanding the development of behavior embedded in places and events**

*Chihiro Nishio*

*Konan University, Japan*

**B20. Affordance dynamics during gender-affirming hormone therapy**

*Patric Nordbeck, Otto E. Snoeren, Tove Lundberg*

*Lund University, Sweden*

**B21. The effects of ambient light intensity on affordance perception**

*Tyler Overstreet, Myah Kelly, Ron Dickson, Alen Hajnal*

*The University of Southern Mississippi, USA*

**B22. Drawing animals in the palaeolithic: Investigating the roles of perspective and outline completeness**

*Murillo Pagnotta, Mateusz Psujek, Riccardo Fusaroli, Kristian Tylén*

*Aarhus University, Denmark*

**B23. Towards a framework of aesthetic and artistic sense-making**

*Lisa-Maria van Klaveren<sup>1,2</sup>, Ralf Cox<sup>2</sup>, Gemma Schino<sup>2</sup>, Theisje van Dorsten<sup>2</sup>, Barend van Heusden<sup>2</sup>*

<sup>1</sup>*Amsterdam University Medical Center, The Netherlands*

<sup>2</sup>*University of Groningen, The Netherlands*

**POSTER SESSION C**, Friday June 28 (16:30-18:00)

**C1. Interpersonal coordination in (almost) doctor-patient communication**

*Kinga Palatinus, Zsolt Dudás, Oguz Kelemen  
University of Szeged, Hungary*

**C2. Multifractal analysis of developing map reading skills**

*Zsolt Palatinus<sup>1</sup>, Zsolt Dudás<sup>1</sup>, Ádám Tóth<sup>1</sup>, Anett Kádár<sup>1</sup>, Viktor Pál<sup>1</sup>, Péter Bagoly-Simó<sup>2</sup>  
<sup>1</sup>University of Szeged, Hungary  
<sup>2</sup>Humboldt University in Berlin, Germany*

**C3. Psychological and physiological outcomes of interpersonal synchrony during yoga**

*Caitrín Hall, Alexandra Paxton  
University of Connecticut, USA*

**C4. Do arm-support exoskeletons affect pointing movements and accuracy?**

*Balagopal Raveendranath, Christopher C. Pagano, Divya Srinivasan  
Clemson University in South Carolina, USA*

**C5. An ecological approach to colored shadows in nature and art**

*Catherine Read  
Rutgers University, Ithaca College, USA*

**C6. Metacommunication and understanding in computer-mediated narratives**

*Lucia Rivas<sup>1</sup>, Kerry S. Kleyman<sup>2</sup>, Alexandra Paxton<sup>1</sup>  
<sup>1</sup>University of Connecticut, USA  
<sup>2</sup>Metro State University in Minnesota, USA*

**C7. MultiSOCIAL toolbox: An open-source library for quantifying multimodal social interaction**

*Veronica Romero<sup>1</sup>, Tahiya Chowdhury<sup>1</sup>, Alexandra Paxton<sup>2</sup>  
<sup>1</sup>Colby College, USA  
<sup>2</sup>University of Connecticut, USA*

**C8. The role of emotions in sense-making with art: An interdisciplinary study**

*Gemma Schino<sup>1</sup>, Samrddhee Pathare<sup>1</sup>, Lisa-Maria van Klaveren<sup>1,2</sup>, Theisje van Dorsten<sup>3</sup>,  
Barend van Heusden<sup>1</sup>, Ralf Cox<sup>1</sup>  
<sup>1</sup>University of Groningen (RUG), The Netherlands  
<sup>2</sup>Amsterdam University Medical Center, University of Amsterdam, The Netherlands  
<sup>3</sup>University College Groningen, University of Groningen, The Netherlands*

**C9. Motor control consequences of constraining postural sway during practice of an upper-limb precision aiming task in individuals with chronic stroke**

*Sarah M. Schwab-Farrell, Tehran J. Davis, Michael A. Riley, Paula L. Silva  
University of Cincinnati in Ohio, USA*

**C10. Task constraints influence how social affordances are nested in rugby union**

*Ludovic Seifert<sup>1</sup>, Guillaume Hacques<sup>2</sup>, Quentin Bourgeois<sup>1</sup>, Mickael Campo<sup>3</sup>*

<sup>1</sup>*University of Rouen Normandy, France*

<sup>2</sup>*University of Clermont-Ferrand, France*

<sup>3</sup>*University of Bourgogne, France*

**C11. Gap perception in porpoises and dolphins: Passability estimation for vertical and horizontal gaps**

*Natsumi Shibata<sup>1</sup>, Seiichi Kaji<sup>2</sup>, Masatoshi Tsunokawa<sup>2</sup>, Kiyohide Ito<sup>3</sup>, Takashi F. Matsuishi<sup>1</sup>*

<sup>1</sup>*Hokkaido University, Hokkaido, Japan*

<sup>2</sup>*Otaru Aquarium, Co., LTD., Hokkaido, Japan*

<sup>3</sup>*Future University Hakodate, Hokkaido, Japan*

**C12. Out of sight, out of mind? Neuronal gamma oscillations during occlusion events in babies**

*Regine Slinning, Seth B. Agyei, Silje H. Kristoffersen, Ruud van der Weel, Audrey van der Meer  
Norwegian University of Science and Technology (NTNU) in Trondheim, Norway*

**C13. Extrinsic time, intrinsic time**

*Thomas A. Stoffregen<sup>1</sup>, Robert Heath<sup>2</sup>*

<sup>1</sup>*University of Minnesota, USA*

<sup>2</sup>*Hiawatha Valley Education District, Minnesota, USA*

**C14. Opening the black box of team-based learning: Exploring team learning dynamics in online application sessions**

*Lisa-Maria van Klaveren, Linda Roossien, Tobias Boerboom, Rien de Vos  
University of Amsterdam, The Netherlands*

**C15. Disruptive behaviors in backchannels and eye-contacts during dyadic interaction in schizophrenia**

*Victor Vattier<sup>1,2,3</sup>, Ludovic Marin<sup>2,4</sup>, Richard Schmidt<sup>6</sup>, Tifenn Fauviaux<sup>2,4</sup>, Mathilde Parisi<sup>2,4</sup>,  
Stéphane Raffard<sup>3,5</sup>*

<sup>1</sup>*Laboratory of Psychology Epsilon Montpellier*

<sup>2</sup>*Euromov DMH Montpellier, France*

<sup>3</sup>*University of Montpellier III - Paul Valery, France*

<sup>4</sup>*University of Montpellier, France*

<sup>5</sup>*CHU Montpellier, France*

<sup>6</sup>*College of the Holy Cross in Worcester, Massachusetts, USA*

**C16. Infant age classifier for a baby brain-computer interface**

*Đorđe Veljković, Silje-Adelen Nenseth, Audrey van der Meer, Seth B. Agyei*

*Norwegian University of Science and Technology (NTNU) in Trondheim, Norway*

**C17. How many potential collisions do we respond to at once: Investigating the efficacy of visual thresholds in human crowds**

*Kyra Veprek, William H. Warren*

*Brown University in Rhode Island, USA*



**C18. When left means right: Spatiotemporal extension and stimulus-response compatibility**

*Emily Wang, Tehran J. Davis, John G. Holden, Kevin Shockley  
University of Cincinnati in Ohio, USA*

**C19. Development of visual motion perception in full-term and preterm infants and children: A longitudinal high-density EEG study**

*Jin Wang, Audrey Van der Meer, Seth B. Agyei, Silje-Adelen Nenseth  
Norwegian University of Science and Technology (NTNU) in Trondheim, Norway*

**C20. Seeing the unseen boundary behind you: Predicting the out-of-bounds of flick serves in playing badminton doubles**

*Zuoqi Zhang, Zhichen Feng, Tristan Wallhead, Kenneth Gerow, Qin "Arthur" Zhu  
University of Wyoming, Laramie, USA*

**C21. Modeling the angle-of-approach effect in manual lateral interception**

*Danial Borooghani, Remy Casanova, Frank T. J. M. Zaal, Reinoud J. Bootsma*

**C22. Coordinative structures exploit co-activation and co-variation of muscles**

*Raoul Bongers<sup>1</sup>, Iris Slooter<sup>1</sup>, Morten Kristoffersen<sup>2</sup>  
<sup>1</sup>University Medical Center Groningen, The Netherlands  
<sup>2</sup>University of Gothenburg, Sweden*

