

September 8 2021

14.00  
14.30 **Conference opens**

14.30 **Opening session**  
15.00 *Tomé Pires, David Brown, Sebastian Koenig and Pedro Gamito*

KEYNOTE #1

15.00 **The Evolution of Virtual Humans in Clinical Virtual Reality and Beyond!** in-person  
16.00 *Skip Rizzo*

Physical/motor rehab studies  
*Chair: Micaela Fonseca*

16.00 **Virtual Reality and Rehabilitation: Review of Reviews** online  
16.15 *Dido Green, N Keijsers and P Aarts*

16.15 **Evaluation of a virtual reality tandem-bike exergame for rehabilitatoin** in-person  
16.30 *Emil Hoeg, J Bruun-Pedersen, S Cheary, L Andersen, R Paisa, S Serafin, B Lange*

16.30 **Augmented Reality and Real-Time Feedback for Physical Therapy** in-person  
16.45 *Linda Lancere and I Kugaudo*

16.45  
17.15 **Coffee break**

17.15 **Promoting physical activity using pervasive social games: case studies with elderly people in Brazil and Japan** online  
17.30 *Luciano Santos, K Okamoto, SS Funghetto, AS Cavalli, R Otsuki, S Hiragi, G Yamamoto, O Sugiyama, CD Castanho, T Aoyama and T Kuroda*

17.30 **Feasibility of Assessing Balance via a Virtual Reality Bus Ride** online  
17.45 *A Gonçalves, M Montoya, R Llorens and Sergi Bermúdez i Badia*

17.45 **The design of a fully immersive virtual reality game for upper limb rehabilitation post-stroke using mirror therapy** online  
18.00 *Senai Leniston-Kahsai, E Ramirez, B Robinson, N Signal and B Mallettdia*

18.00 **Natural locomotion for patients in VR-based supermarket tasks** online  
18.15 *Paul Chojecki, D Runde, D Przewozny, M Lafci, M Gaebler, J Tromp, S Krohn, F Klotzsche, M Kovalenko, J Belger, A Thöne-Otto, C Finke, O Schreer and P Eisert*

September 9 2021

Cognitive assessment and rehab  
*Chair: Teresa Souto*

09.30 **Cognitive stimulation using virtual reality on activities of daily living in people with mild to moderate dementia due to Alzheimer's disease** in-person  
09.45 *J Oliveira, Rita Conde, T Souto, M Ferreira, T Corotnean, S Cardoso, A Andrade, T Neto, A Fernandes and P Gamito*

09.45 **Research in serious games for people with intellectual disability: a meta-analysis study** online  
10.00 *Carla Sousa*

10.00 **EEG analysis pipeline optimized to detect therapeutically relevant brain states in real time for clinical rehabilitation applications** online  
10.15 *Eric McDermott, J Metsomaa, U Ziemann and C Zrenner*

10.15	<b>Size and behaviour of virtual objects may be important for cognitive and motor rehabilitation: preliminary results</b>	online
10.30	<i>Imre Cikajlo, K Grabljevec, T Klun, P Rogelj, G Vucko, D Zajc, A Hukic, K Susnik, M Vidmar and A Pertot</i>	
Synthetic agents <i>Chair: Filipe Luz</i>		
10.30	<b>Synthetic agents: relaxing agents?</b>	in-person
10.45	<i>P Gamito, Teresa Souto, J Oliveira, A Conde, MJ Ferreira, J Alves de Sousa, Teixeira, M Ferreira, F Dias, S Atul, R Pereira and E Távora</i>	
10.45	<b>Putting into a female body: the feasibility of 360° video-based virtual reality to induce the body swap illusion</b>	in-person
11.00	<i>Sara Ventura, G Cardenas, M Miragall, G Riva and R Baños</i>	
11.00	<b>Interviewing a Virtual Patient: Exploring patterns in clinical interviewing of psychologists</b>	in-person
11.15	<i>Shivani Mansuklal, P Gamito and T Souto</i>	
11.15	<b>Construction and effect of relationships with agents in a virtual reality</b>	online
11.30	<i>Mauro Bianchi, T Abril and J Oliveira</i>	
11.30	<b>Coffee break</b>	
12.00	VR and psycho-medical applications <i>Chair: Jorge Oliveira</i>	
12.00	<b>Tele-guidance based Remote Navigation Assistance System for Visually Impaired and Blind People – Development and User Experience Study</b>	online
12.15	<i>Babar Chaudary, S Pohjolainen, S Azziz, L Arhipainen and P Pulli</i>	
12.15	<b>Using Virtual Reality Applications for Management of Chronic Cancer Pain: User perceptions and preferences</b>	online
12.30	<i>Gordon Tao, B Garrett, T Taverner, E Cordingley and C Sun</i>	
12.30	<b>An intelligent virtual environment for treating anxiety exploring the Eye Movement Desensitization and Reprocessing technique</b>	online
12.45	<i>B Cons, FM de Oliveira, V Werneck and Rosa Maria Costa</i>	
12.45	<b>Using virtual reality to improve classroom engagement in people with Down Syndrome</b>	online
13.00	<i>Stefan Michalski, A Szpak, C Ellison, R Cornish and T Loetscher</i>	
13.00	<b>From Lab to Rehab: Is virtual reality being adopted clinically for children?</b>	online
13.15	<i>William Farr, S Glegg, I Male and D Green</i>	
13.15	<b>Lunch</b>	
Cognitive assessment and rehab <i>Chair: Rita Farias</i>		
14.45	<b>Effect of Immersive Visualization Technologies on Cognitive Load, Motivation, Usability, and Embodiment</b>	in-person
15.00	<i>Nicolas Wenk, J Penalver-Andres, K A Buetler, T Nef, R M Müri and L Marchal-Crespo</i>	
15.00	<b>Characterizing the Use of Interactive Technologies for Cognitive Rehabilitation in Portuguese Healthcare Institutions: Preliminary Results</b>	online
15.15	<i>Teresa Paulino and MS Cameirão</i>	

15.15 15.30	<b>Efficacy of adaptive cognitive training through desktop virtual reality and paper-and-pencil in the treatment of mental and behavioral disorders</b> <i>Joana Camara, J Nobrega, S Bermudez i Badia and AS Faria</i>	online
15.30 15.45	<b>Road crossing behaviors of Pedestrians in two different Virtual Reality Environments</b> <i>Muhammad Ahmad and MS Cameirão</i>	online
15.45 16.00	<b>Increasing Spatial Skills of Young Children with Special Needs Using the OSMO-Tangram Based on Tangible Technology Versus a Tangram Card Game</b> <i>Orly Lahav, A Wolfson, and V Talis</i>	online
16.00 16.15	<b>Normative Data for a Next Generation Virtual Classroom for Attention Assessment in Children with ADHD and Beyond!</b> <i>Albert "Skip" Rizzo, J Chen, J Wang, A Ma, CY Chang, J Turnbull and C Shao</i>	in-person
16.15 16.45	<b>Coffee break</b>	
Cognitive assessment and rehab <i>Chair: Rita Conde</i>		
16.45 17.00	<b>Virtual Environment Grocery Store (VEGS) for assessing memory in persons with epilepsy: A Comparative Study on the Predictive Ability of the Support Vector Machine</b> <i>Timothy McMahan, T Duffield and T Parsons</i>	online
17.00 17.15	<b>Assessing the Usability of Current Generation Virtual Reality in Adults with Intellectual Disabilities</b> <i>Matthew Harris, J Lewis, D Brown and P Vyas</i>	online
17.15 17.30	<b>Clinical feasibility of the immersive Virtual Memory Task in patients with prodromal Alzheimer's Disease</b> <i>Stephan Krohn, S Rekers, H Megges, S-D Freiesleben, J Belger, EM Quinque, M Blume, J Tromp, F Klotzsche, L Kämmer, S Kray-Niemczyk, P Chojecki, A Thöne-Otto, M Gaebler, O Peters, C Finke</i>	online
17.30 17.45	<b>Systematic Literature Review: Technology-Based Interventions for Social Functioning Rehabilitation in Individuals with ABI</b> <i>Laura-Jane Douch, M Keijsers and S Hoermann</i>	online
17.45 18.45	<u>KEYNOTE #2</u> <b>If the style is the man himself, how to quantify it?</b> <i>Pierre-Paul Vidal</i>	online
18.45 19.45	<b>Steering Committee</b>	
September 10 2021 VR and psycho-medical applications <i>Chair: Ágata Salvador</i>		
09.30 09.45	<b>Validation of a Virtual Reality Environment for Obsessive–Compulsive Disorder</b> <i>Iveta Fajnerova, A Francová, B Darmová, K Taranzová, E Nosková and P Stopková</i>	in-person
09.45 10.00	<b>Soundspace VR: preliminary data on a virtual reality task to study spatial navigation</b> <i>L Fialho, Jorge Oliveira, F Luz and P Gamito</i>	in-person
10.00 10.15	<b>Assessment of spatial navigation in multiple sclerosis and anti-NMDA receptor encephalitis using virtual environments</b>	online

	<i>Sophia Rekers, G Cooper, J Heine, S Krohn, HPrüss, F Paul and C Finke</i>	
10.15 10.30	<b>Moving from VR into AR using Bio-cybernetic Loops and Physiological Sensory Devices for Intervention on Anxiety Disorders</b> <i>Preyese Arquissandás, D Lamas and J Oliveira</i>	online
10.30 10.45	<b>Dimensionality of Realism Across Media Literature</b> <i>Lauren Christophers and B Rooney</i>	online
10.45 11.00	<b>Development of Cooperative Assistive Technology User Experience Evaluation Model for Blind and Visually Impaired People</b> <i>Sami Pohjolainen, B Chaudary, L Arhippainen and P Pulli</i>	online
11.00 11.15	<b>Virtual reality online therapy: Development of a multipurpose application for psychological intervention</b> <i>Fábio Dias, P Gamito, T Souto</i>	in-person
11.15 12.00	<b>Poster session*</b> <b>Phil Lopes</b>	
12.00 12.30	<b>Coffee break</b>	
12.30 13.30	<b>KEYNOTE #3</b> <b>(Working towards) Probably the best (re)habilitation complex in the world</b> <i>Tony Brooks</i>	in-person
13.30 14.00	<b>Prize session</b> <b>David Brown</b>	
14.00 14.15	<b>Closing remarks</b>	
14.15 15.00	<b>Light lunch</b>	

<b>*Poster session</b>		
	<b>Emotional Carousel: A Novel System for Emotional Regulation</b> <i>Iveta Bruno Patrão, G Assunção, P Menezes, N Gonçalves, P Castilho</i>	
	<b>Virtual Reality-based Visual Training for Vestibular Rehabilitation</b> <i>Bruno Ferreira, E Pereira, P Menezes</i>	
	<b>Virtual museum to promote accessibility to art and cultural heritage: quantitative study on user experience within a virtual reality task</b> <i>Filipe Luz, J Oliveira and V Flores</i>	
	<b>Flies - a serious virtual game for cognitive assessment and rehabilitation</b> <i>Iveta Fajnerová, J Hurych, A Plechatá, F Vorel and J Wild</i>	
	<b>Visuomotor adaptation in HMD-VR increases cognitive load</b> <i>Julia Juliano and S-L Liew</i>	
	<b>Ghostly: An EMG controlled serious game</b> <i>K Kostkova, Lubos Omelina, E Swinnen, M Degelaen, B Jansen</i>	
	<b>Simulating Lens Distortion in Virtual Reality</b> <i>Niklas Stein, K Rifai, S Wahl and M Lappe</i>	
	<b>Developing a 360° video-based Virtual Reality: an explorative and a user experience studies to generate a sexual harassment scenario</b> <i>Sara Ventura, G Cardenas, G Riva, R Baños</i>	
	<b>Effects of Personalized Games on Balance in Children with Cerebral Palsy</b> <i>O Kachmar, Anna Kushnir, K Helland, B Fedchyshyn and I Ablikova</i>	
	<b>Virtual Dark Room for Exposure to Intrusive Thoughts</b> <i>Anna Francova, P Stopkova, B Darmova, J Kosova, I Fajnerova</i>	

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**Walking with immersive virtual reality: the effect of optic flow speed on spatiotemporal gait parameters in people post-stroke**

*Emma De Keersmaecker, B Serrien, D Cianca, N Lefeber, L Cuypers, E Kerckhofs, C Rodriguez-Guerrero, B Jansen and E Swinnen*

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**An Integrative Review of Rehabilitation Training based on Virtual Reality for Children with Cerebral Palsy**

*S Park, Seul Gi Kim, K Lee, G Lee, J Jung, S Oh, I Cho, S On, H Kim and H Kweon*

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**neomento—Modern Virtual Reality System for Psychotherapy**

*A Streck, Philipp Stepnicka, R Frank, J Klaubert and T Wolbers*

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**MobVIP: An Assistive Technology to Improve Mobility of Visually Impaired**

*A Karkouti, Elahe-Kani Zabihi, M Nasralla, Drishty Sobnath and Ikram Ur Rehman*

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