

## September 11

### Monday

15:00-

#### TUTORIAL

IF 01

##### Using VR technology in education

All participants will receive free **MaxWhere** VR environment

18:00-

#### WELCOME RECEPTION

Lovarda (DE, Kassai út)

## September 12

### Tuesday

8:00-9:00

#### REGISTRATION

9:00-9:20

#### OPENING

IF 01

9:20-9:50

#### PLENARY LECTURE: Thomas Görnitz and Brigitte Görnitz

Plenary Session Chair: Atsushi Ito

IF 01

##### „From Quantum Theory to Mental Phenomena“

Cognition is the detection and Communication is an exchange of meaningful information. Meaningful information is able to regulate and to steer unstable systems by unleashing available energy. Energy can act on the matter to move it or to transform it. So we can define: Matter is what resists change. Energy is what can change matter. Information is what can release energy. All these relations are possible due to the fact that matter, energy, and information are different forms of a unique basic entity: bits of abstract quantum information (AQIs). To avoid the popular misunderstanding of „information“ as „meaningful“ it was necessary to find a new word for the free-of-meaning AQI bits: the AQIs establish a quantum pre-structure termed „Protyposis“ (Greek: „pre-formation“). Contrary to usual information theory, the AQIs must be imagined also as free of emitter and receiver. Quantum theory rests on two principles of common sense:

- Mostly a whole is more than the sum of its parts.

Simple examples are porcelain (it is more than its shards) or animals. As a mathematical consequence systems must be composed of tensor products of their state spaces, instead of direct sums.

- Even possibilities have an influence on processes, not only facts.

Real numbers describe facts. However, acting possibilities, “virtual facts”, are defined by imaginary numbers. The popular superstition that smallness implies simplicity seems to be ineradicable. However, since the beginning of quantum theory, it would be possible to realize that the circumstances in nature are exactly the other way round. The idea “smaller becomes simpler” is useful only down to the atoms of chemistry.

Planck's formula  $E=hc/\lambda$  shows that smaller extensions are related to larger energies. That more and more energy should result in simpler and simpler structures, this does not only sound absurd, it is absurd. The tensor product construction in quantum theory admits the development of new structures from simpler ones. The most simple quantum structures, the AQIs, have only a two-dimensional state space. For information, it is evident that more information allows a narrower localization. With the quantum theory of the Protyposis, a cosmological model is constructed. The AQIs can form also relativistic particles. They allow an explanation of the structure of the fundamental interactions, the electromagnetic, the weak and the strong interaction. In living beings, the AQIs can become meaningful and eventually they can also form a conscious mind. The AQIs and quantum nonlocality have made possible also to explain psychic phenomena that are at the center of common interest of the psychologist C. G. Jung and the physicist Wolfgang Pauli, e. g synchronicity.

9:50-10:20

**PLENARY LECTURE: Attila Pethő**

IF 01

Plenary Session Chair: Attila Gilányi

**“Data protection in the cyber space”**

The amount of data transmitted and/or stored in the cyber space is growing exponentially. A considerable part of it is sensitive. With the spread of smart devices the demand and necessity of technological data protection continuously increases. Cloud storing and computing, virtual reality, especially virtual money, and the Internet of things raise a lot of new questions. In our talk we concentrate on the most important problems; on authentication and the proof of integrity. We present the basic methods of private-, and public key and hybrid cryptography, which make it possible to secure our virtual environments.

10:20-10:40

**COFFEE BREAK**

10:40-12:20

**PANEL SESSION**

<b>IF 01</b>	<b>Session Chair: Anna Esposito</b>
<b>Track</b>	<b>Linguistic and Behavioural Interaction Analysis I. Organizers: A. Esposito, A. M. Esposito, C. Vogel, M. Koutsombogera</b>
Rentoumi Vassiliki, Dimitra Arfani, Katerina Fragkopoulou, Eva Danasi, Spyridoula Varlokosta and George Paliouras	Automatic Detection of Linguistic indicators as a means of early detection of Alzheimer's and of related dementias: A Computational Linguistics analysis
László Czap and Lu Zhao	Phonetic Aspects of Chinese Shaanxi Xi'an Dialect

Raffaele Sperandeo, Enrico Moretto, Gesualda Baldo, Silvia Dell'Orco and Nelson Mauro Maldonato	Executive Functions and Personality Features: a Circular Interpretative Paradigm.
Costanza Navarretta	Prediction of Audience Response from Spoken Sequences, Speech Pauses and Co-speech Gestures in Humorous Discourse by Barack Obama
Ingo Schmitt, Ronald Römer, Günther Wirsching and Matthias Wolff	Denormalized Quantum Density Operators for Encoding Semantic Uncertainty in Cognitive Agents

<b>I 130</b>	<b>Session Chair: Jan Balata</b>
Madiha Tariq, Lena Uhlenberg, Pavel Trivailo, Khurram Munir and Milan Simic	Mu-Beta Rhythm ERD/ERS Quantification for Foot Motor Execution and Imagery Tasks in BCI Applications
Attila Adamkó	Smart Campus Service Link: Adaptation and Interaction Planes for Campus and University Environments
Jonathán Ozsváth, Ákos Tóth and Roland Kunkli	An MPEG-4 based talking head for real time voice chatting on Android platform
Attila Perecsényi and Istvan Fazekas	Numerical analysis of a network evolution model
Hamza Nemouchi and Sztrik Janos	Performance Evaluation of Finite-Source Cognitive Radio Networks with Collision Using Simulation

**12:20-13:20** LUNCH BREAK

Lovarda (DE, Kassai út)

**13:30-14:40** PANEL SESSION

<b>IF 01</b>	<b>Session Chairs: Günther Wirsching and Ronald Römer</b>
<b>Sesion</b>	<b>Representation of uncertain knowledge. I. Organizers: Profs. G. Wirsching &amp; R. Römer</b>
Vesa Niskanen, Angela Minzoni and Eleonore Mounoud	A Case Study on Time-Interval Fuzzy Cognitive Maps in a Complex Organization

Mohamed Amine Korteby and Zoltan Gal	Perception of Delay Tolerant Network Behavior with Cognitive Sonification Controller
Antti Hyvärinen and Vesa Niskanen	A New Fuzzy Statistical Method for Cognitive Maps. Application for Modelling Finnish Dairy Farms' Profitability
Sepideh Sadeghi and Matthias Scheutz	Joint Acquisition of Word Order and Word Referent in a Memory-Limited and Incremental Learner

<b>I 130</b>	<b>Session Chair: Miroslav Macik</b>
<b>Track</b>	<b>Human factors, E-health, and People with Specific Needs. I. Organizer: M. Macik</b>
Anikó Vágner	Cognitive Infocommunication for Monitoring and Improving Well-being of People
Niina Katajapuu, Mika Luimula, Aung Pyae, Yin Leng Theng, Tan Phat Pham, Jinhui Li and Keizo Sato	Benefits of Exergame Exercise on Physical Functioning of Elderly People
Atsushi Ito, Yuko Hiramatsu, Fumihiko Sato, Kazutaka Ueda, Yasunari Harada, Miwa Morishita, Akira Sasaki, Rina Hayashi, Hiroyuki Hatano, Kenji Shoji and Mie Sato	A Cognitive Model of Sightseeing for Mobile Support System
Dominika Palivcova, Miroslav Macik and Zdenek Mikovec	SuSy: Surveillance System for Hospitals

**14:40-16.00** PANEL SESSION

<b>IF 01</b>	<b>Session Chair: Klára Vicsi</b>
<b>Track</b>	<b>Speech information representation inside CogInfoCom I. Organizer: K. Vicsi</b>

Dávid Sztahó, Miklós Gábrriel Tulics, István Valálik and Klara Vicsi	Automatic Estimation of Severity of Parkinson's Disease Based on Speech Rhythm Related Features
Miklós Gábrriel Tulics and Klara Vicsi	Phonetic-class based correlation analysis for severity of dysphonia
Máté Ákos Tündik, Gábor Kiss, Dávid Sztahó and György Szaszák	Assessment of pathological speech prosody based on automatic stress detection and phrasing approaches
Gábor Kiss and Klara Vicsi	Investigation of Cross-lingual Depression Prediction Possibilities Based on Speech Processing

<b>I 130</b>	<b>Session Chair: Niina Katajapuu</b>
<b>Session</b>	<b>Virtual Reality</b>
Gábor Csapó	Sprego Virtual Collaboration Space
Gábor Csapó	DEMO: Sprego Virtual Collaboration Space: Improvement Guidelines for the MaxWhere Seminar System
Marián Hudák, Štefan Korečko and Branislav Sobota	On Architecture and Performance of LIRKIS CAVE System
Gyöngyi Bujdosó, Ovidiu Constantin Novac and Tamás Szimkovics	Developing cognitive processes for improving inventive thinking in system development using a collaborative virtual reality system

**16:00-16:20** COFFEE BREAK

**16:20-17:40** PANEL SESSION

<b>IF 01</b>	<b>Session Chair: Klára Vicsi</b>
<b>Track</b>	<b>Speech information representation inside CogInfoCom. II. Organizer: K. Vicsi</b>

Annamária Kovács, István Winkler and Klára Vicsi	EEG correlates of speech: examination of event related potentials elicited by phoneme classes
Máté Ákos Tündik, Balázs Tarján and György Szaszák	A Bilingual Comparison of MaxEnt- and RNN-based Punctuation Restoration in Speech Transcripts
Gábor Kiss and Klara Vicsi	Comparison of read and spontaneous speech in case of Automatic Detection of Depression

<b>IF 130</b>	<b>Education based on Cognitive infocommunications. Organizers: Horváth Ildiko and Attila Kővári</b>
<b>Session</b>	<b>CogInfoCom based learnability. Organizer: Attila Kővári</b>
Elod Gogh, Attila Kovacs and Gergely Sziladi	Implementation of E-diary and use to analyze the effectiveness of learning
György Molnár Dr., Kinga Biró, Dalma Pap and Zoltán Szűts Dr.	The impact of virtual and augmented learning environments on the teaching and learning process in secondary and higher education
Jozsef Katona, Tibor Ujbanyi, Gergely Sziladi and Attila Kovari	Examine the Effect of Different Web-based Media on Human BrainWaves
Gergely Sziladi, Tibor Ujbanyi, Jozsef Katona and Attila Kovari	The analysis of hand gesture based cursor position control during solve an IT related task

19:00-

BANQUET

University of Debrecen, Main building, Aula

**September 13**

**Wednesday**

**9:00-9:30**

**PLENARY LECTURE: Valéria Csépe**

**IF 01**

Plenary Session Chair: Gyula Sallai

**“Challenges faced by humans in a common cognitive system shared with smart machines”**

*MTA RCNS Brain Imaging Centre, Budapest, Hungary*

Humans and all smart devices especially those applying the newest result of artificial intelligence (AI) research form a shared capacity cognitive system of immersive quality. Multi-disciplinary research on the cognitive information change as well as on the situation awareness is more timely than ever as the application of AI takes part in the common cognitive system of humans and machines. While the fast development of engineering is far ahead of human development the routine use of smart devices and intelligent systems is hindered by the delayed emergence of a common cognitive system. Although the amount of data on the changeable nature of cognitive abilities and skills of children and youngsters increases the conclusions drawn are rather contradicting. As the newest data show the concept of ‘digital natives’ is a rather a myth than confirmed scientific result, a radically new approach is needed for understanding how the human-machines systems operating in a cognitive space develop and how the cognitive capacity of abilities and skills emerge in the interaction experienced from early childhood on.

Cognitive science is on its way to contribute to a better understanding the human-robot teams, the physical and cyber security systems, as well as the intelligent transportation systems. The presentation will highlight how cognitive science may contribute to interpreting and integrating disparate data into a more consistent world model. For illustration two challenges of the recent and coming years will be discussed: (1) effect of early experience with smart devices on cognitive development, (2) emergence of cognitive space and situation awareness, (3) challenges of digital school and blended learning.

**9:30-10:00**

**PLENARY LECTURE: Ágoston Török**

**IF 01**

Plenary Session Chair: Stanislav Ondáč

**“The neuroscience of virtual reality: an applied research perspective”**

*MTA Systems and Control Laboratory, Institute for Computer Science and Control Budapest, Hungary*

Virtual reality (VR) is a unique area of research in that novel experimental findings are often quickly channelled into cutting edge technology. While most studies deal with the technical challenges of VR, in this talk I am going to focus more on design principles. I will argue that virtual reality – be it fully virtual, augmented, or mixed – is not only an interesting platform but also paves the way to a new era of interaction with information. Notably, this interaction is characterized by three main features: it is (1) intuitive, (2) organic, and (3) unconstrained. Intuitive means that it is easy to engage with VR no matter the person’s age, culture and background knowledge. Organic means that VR is not only a visualization form but much more importantly a multisensory experience - one that relies on how living organisms perceive the world around them. And finally, VR offers an unconstrained experience in that it is not tied to the physical world but is free to accommodate anything that is perceivable by the brain. I will use insights from classical and more recent experiments in cognitive neuroscience and psychology to justify these claims. Finally, I will provide some examples to highlight why I believe certain applications are destined to succeed and others are doomed to fail.

**10:00-10:20** COFFEE BREAK

**10:20-12:00** DEMO: VIRTUAL REALITY IN EDUCATION IF 01

The representatives of the University of Debrecen, Széchenyi István University, University of Pécs and the University of Dunaújváros will demonstrate how to use virtual reality in education

**12:00-13:00** LUNCH BREAK Lovarda (DE, Kassai út)

**13:00-14:20** PANEL SESSION

<b>IF 01</b>	<b>Session Chair: Carl Vogel</b>
<b>Track</b>	<b>Linguistic and Behavioural Interaction Analysis II. Organizers: A. Esposito, A. M. Esposito, C. Vogel, M. Koutsombogera</b>
Anna Esposito, Antonietta Maria Esposito, Mauro Maldonato and Carl Vogel	Differences between hearing and deaf subjects in assessing foreign emotional faces
Fereshta Yazdani, Matthias Scheutz and Michael Beetz	Task-based Evaluation for Improving Natural Language Understanding in Human-Robot Rescue Teams
Vasanth Sarathy, Matthias Scheutz and Bertram Malle	Learning Socio-Cultural Behavioral Norms in Uncertain and Changing Contexts



James Henshaw, Wei Liu and Daniela Romano	Improving SSVEP-BCI Performance Using Pre-Trial Normalization Methods
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<b>I 130</b>	<b>Session Chair: Károly Hercegfí</b>
<b>Session</b>	<b>UX within CogInfoCom. Organizer: K. Hercegfí</b>
Kapusy Katalin and Lógó Emma	Values Derived from Virtual Reality Shopping Experience among Generation Z
Balint Szabo and Karoly Hercegfí	Research questions on integrating user experience approaches into software development processes
Dalma Geszten, Balázs Péter Hámornik and Károly Hercegfí	Measurement of team mental model as a part of a new team usability testing method
C. Sik-Lanyi, V. Szucs, T. Guzsvinecz, S. Shirmohammadi, B. Abersek, K. Van Isacker and A. Lazarov	How to develop serious games for Cognitive Competence of Children with Learning Difficulties

#### 14:20-15:40 PANEL SESSION

<b>IF 01</b>	<b>Session Chair: Maria Koutsombogera</b>
<b>Track</b>	<b>Linguistic and Behavioural Interaction Analysis III. Organizers: A. Esposito, A. M. Esposito, C. Vogel, M. Koutsombogera</b>
Milan Gnjatović, Jovica Tasevski, Dragiša Mišković, Srđan Savić, Branislav Borovac, Aleksandra Mikov and Rastislava Krasnik	Pilot Corpus of Child-Robot Interaction in Therapeutic Settings
Graham Wilcock and Kristiina Jokinen	Bringing Cognitive Infocommunications to small language communities
Javier Mikel Olaso and María Inés Torres	User Experience Evaluation of a Conversational Bus Information System in Spanish
Arindam Ghosh, Evgeny Stepanov,	

Morena Danieli and Giuseppe Riccardi	Are You Stressed? Detecting High Stress from User Diaries- helyett learning socio cultural
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<b>I 130</b>	<b>Session Chair: Miroslav Macik</b>
<b>Track</b>	<b>Human factors, E-health, and People with Specific Needs. II. Organizer: M. Macik</b>
Vojtech Gintner, Jan Balata, Jakub Boksansky and Zdenek Mikovec	Improving Reverse Geocoding: Localization of Blind Pedestrians Using Conversational UI
Miroslav Macik, Ivo Maly, Jan Balata and Zdenek Mikovec	How can ICT help the visually impaired older adults in residential care institutions: The everyday needs survey
Anna Kutiková, Jan Balata and Zdenek Mikovec	Explorations into ICT Usage and Behavior in Travel Related Activities of Wheelchair Users
Abel Garai, Istvan Pentek and Attila Adamko	Interaction-dependent e-Health hub-software adaptation to cloud-based electronic health records

**15:40-16:00** COFFEE BREAK

**16:00-17:20** PANEL SESSION

<b>IF 01</b>	<b>Session Chair: Ágoston Török</b>
<b>Track</b>	<b>Cognitive data visualization. Organizer: Á. Török</b>
Dániel Balla, Tamás Mester, Ágnes Botos, Tibor József Novák, Marianna Zichar, János Rásó and Anita Karika	Possibilities of spatial data visualization with web technologies for cognitive interpretation
David Sik, Kristof Csorba and Peter Ekler	Implementation of a Geographic Information System with Big Data Environment on Common Data Model

György Papp, Ildikó Papp and Roland Kunkli	Three-dimensional connection visualization based on tabular data
Radosław Idzikowski, Konrad Kluwak, Tomasz Nowobilski and Tomasz Zamojski	ANALYSIS OF POSSIBILITY OF VISUALIZATION OF DANGER FACTORS IN THE BUILDING ENVIRONMENT
Ágoston Török, Zsolt Győző Török and Borbála Tölgyesi	Cluttered centres: interaction between eccentricity and clutter in attracting visual attention of readers of a 16th century map

<b>I 130</b>	<b>Session Chair: Katarzyna Chmielewska</b>
Péter Baranyi	Multi TP model transformation for Functions with Different Numbers of Variables
Maria Csernoch and Piroska Biró	First year students' attitude to computer problem solving
Katalin Bubnó and Viktor László Takács	The mathability of word problems as initial computer programming exercises
Katarzyna Chmielewska and Damian Matuszak	Mathability and Coaching
Stanislav Ondáš, Jozef Juhár, Matúš Pleva, Peter Ferčák, Rastislav Husovský	Multimodal Dialogue System with NAO and VoiceXML Dialogue Manager

**19:00- FAREWELL DINNER**

Lovarda (DE, Kassai út)

**September 14**

## Thursday

9:00-9:30

### PLENARY LECTURE: György Szaszák

IF 01

Plenary Session Chair: Gyula Sallai

#### **“Speech Prosody: a Barely Known, yet Surprisingly Versatile Cue and its Rich Exploitation Possibilities in Cognitive Infocommunications”**

The prosody of human speech carries important information, it provides cues for speech perception (i.e. decoding by referring to the information structure via prominence, intonation, rhythm, pauses etc.), it adds additional information to the verbal content, reflects a hierarchical layering of the message or provides cues for synchronization during the communication. It is often mentioned as the first component of human speech that children perceive and learn, already at the foetal stage prior to their birth. Although it has been long known that modelling and generating adequate prosody is crucial in machine produced speech (text-to-speech synthesis), as prosody is very closely correlated with the perceived speech quality, yet, its exploitation in processes relying on automated machine "perception" of speech has been long neglected. Recently, several techniques exploiting speech prosody in cognitive modelling, infocommunications, speech recognition and understanding have been proposed, and the integration of modules capable of such processing of speech prosody becomes more common. The aim of the talk is to give first a short overview of state-of-the-art prosody modelling and present the ways prosody can be exploited in cognitive infocommunications. Thereafter, we also move on to some more concrete applications to illustrate the rich inventory of prosody in the scope of cognitive infocommunications dealing with speech: cognitive models of prosody in speech understanding and summarization, speech recognition, speech analysis, information retrieval and various applications helping language acquisition, rehabilitation of speech or hearing impaired persons or diagnostics of illnesses affecting either cognitive functions or speech production or perception.

9:30-10:00

### PLENARY LECTURE: Ingo Schmitt

IF 01

Plenary Session Chair: Costanza Navarretta

#### **„Data Modeling using Concepts of Quantum Mechanics”**

Quantum mechanics provides a theory for describing microscopical physical systems and their phenomena. Its mathematical theory is one of the most fundamental theory in physics and can be stated by the four famous postulates.

An essential goal of computer science is to semantically model real world objects of a universe of discourse in order to simulate real world processes. The structure of real world objects is represented in an information system by data structures and object behavior by corresponding data processing. It seems to be promising to use the mathematical theory of quantum mechanics for encoding real world objects into specific data structures and processes. We aim to benefit from the fact that quantum

theory combines concepts of logic, linear algebra and probability in one elegant framework whereas traditionally they are treated separately. Many applications from cognition require a consideration of those concepts. The talk is not about quantum computing. Instead, quantum theory is deployed for data modeling on a traditional computer system. The talk will address following questions about data modeling using concepts of quantum theory:

- How can we encode object's property values using state vectors?
- How can complex data structures be constructed using superposition and tensor product?
- How can we retrieve information using projector measurements?
- How can we construct complex queries using quantum logic?
- What is the relation between data dependencies and entanglement?

### 10:00-10:20 COFFEE BREAK

### 10:20-11:40 PANEL SESSION

<b>IF 01</b>	<b>Session Chair: Antonietta Esposito</b>
<b>Track</b>	<b>Linguistic and Behavioural Interaction Analysis IV. Organizers: A. Esposito, A. M. Esposito, C. Vogel, M. Koutsombogera</b>
Maria Koutsombogera and Carl Vogel	Ethical Responsibilities of Researchers and Participants in the Development of Multimodal Interaction Corpora
Anna Moró and György Szaszák	A prosody inspired RNN approach for punctuation of machine produced speech transcripts to improve human readability
Srđan Savić, Milan Gnjatovic, Dragiša Mišković, Jovica Tasevski and Nemanja Maček	Cognitively-Inspired Symbolic Framework for Knowledge Representation
Carl Vogel, Milena Ribeiro Lopes and Anna Esposito	Gender differences in the language of the Map Task dialogues

<b>I 130</b>	<b>Session Chair: Horváth Ildikó</b>
<b>Track</b>	<b>Education based on Cognitive infocommunications. Organizers: Horváth Ildiko and Attila Kóvári</b>
<b>Session</b>	<b>Educoaching. Organizer: Horváth Ildikó</b>
Ildiko Horvath	The IT device demand of edu-coaching in the higher education of engineering

Zoltán Kvasznicza	Teaching electrical machines in a 3D virtual space
Anita Dolgosne Kovacs	Green Roof, as the application opportunities of interactive educational field
Pécz Tibor	Assessment of wetlands by the methods of waterchemistry and bioindication

**11:40-12:40** LUNCH BREAK

Lovarda (DE, Kassai út)

**12:40-14:10** PANEL SESSION

<b>IF 01</b>	<b>Session Chair: Milan Gnjatović</b>
<b>Track</b>	<b>Virtual Reality</b>
István Károly Boda, Erzsébet Tóth, István Csont and László T. Nagy	The use of mythological content in virtual learning environment
Ferenc Erdős and Kallos Gabor	Economical Aspects of 3D Virtual Collaboration
Attila Gilányi, Gyöngyi Bujdosó and Marianna Bálint	Virtual Reconstruction of a Medieval Church
Attila Gilányi, Gyöngyi Bujdosó and Marianna Bálint	Presentation of a Medieval Church in MaxWhere
Seyed Majid Mousavi, Mohammad Moghadasi and Gabor Fazekas	Dynamic resource allocation using combinatorial methods in Cloud: A case study

<b>I 130</b>	<b>Session Chair: Ádám Csapó</b>
Péter Domokos, Máté Széll and Viktor László Takács	Blocklino

Gabriella Kiss, Veronika Takács and Viktor László Takács	János Arany's Meeting to Harry Potter
Maria Csernoch and Erzsébet Dani	Data-structure validator; An application of the HY-DE model
Marton Nemeth and László Drótos	Hungarian web archiving pilot project in the National Széchényi Library
David Sik	Introduction of a Multi-levelled E-learning Environment with Community Contribution

**14:10-14:30** COFFEE BREAK

**14:30-15:10** PANEL SESSION

<b>IF 01</b>	<b>Session Chair: Péter Baranyi</b>
<b>Track</b>	<b>Human factors, E-health, and People with Specific Needs. III. Organizer: M. Macik</b>
Igor Mijić and Marko Šarlija	Classification of Cognitive Load Using Voice Features: A Preliminary Investigation
Eydis Huld Magnusdottir, Kamilla R. Johannsdottir, Christian Bean, Brynjar Olafsson and Jon Gudnason	Cognitive workload classification using cardiovascular measures and dynamic features

<b>I 130</b>	<b>Session Chair: Anna Esposito</b>
<b>Track</b>	<b>Linguistic and Behavioural Interaction Analysis V. Organizers: A. Esposito, A. M. Esposito, C. Vogel, M. Koutsombogera</b>
Justine Reverdy and Carl Vogel	Linguistic Repetitions, Task-based Experience and Proxy Measure of Mutual Understanding
Akira Hayakawa, Carl Vogel, Nick Campbell and Saturnino Luz	Perception changes w/ and w/o the video channel: A study from a Speech-to-Speech, Machine Translation mediated Map Task

**15:10-16:20** PANEL SESSION

<b>I 130</b>	<b>Session Chair: Péter Baranyi</b>
Péter Várlaki, Péter Baranyi	Cognitive and Spiritual Revolution of the Tenth Century – Constantine Porphyrogenitus and his Hidden World Part I. The Great Monarch’s Hidden World of the Great Medieval Mystical Writings
Péter Várlaki, Péter Baranyi	Part II. The Great Monarch’s Hidden World of the Great Medieval Artistic Writings
Péter Várlaki, Péter Baranyi	Imaginational and Interpretational ‘Cognitive Revolution’ of W. Pauli Collaborating with C. G. Jung and Constantine Porphyrogenitus’ Hidden World
Péter Várlaki, Péter Baranyi	‘Hermeneutical and Cognitive Experiments’ of the “Explicit God’s Name’s Crown of Number- archetype 137 in the Book Bahir comparing with the “Fine Structure” of the related Medieval Artistic Works concerning Constantine Porphyrogenitus’ Hidden World

**16:20** CLOSING

IF 01