

**Preliminary PROGRAM of SPCN 2018 in St.Petersburg
Location: Makarova emb. 6**

ORGANIZERS:

**Institute of Electrical and Electronics Engineers (IEEE)
Pavlov Institute of Physiology Russian Academy of Sciences
Pavlov Physiological Society
The Federal Agency for Scientific Organizations
Russian Foundation for Basic Research (RFBR)
Neuroiconics Assistive Co. Ltd.
St.Petersburg State University of Film and Television**

GENERAL CHAIRS

Prof. Narisa Nan Chu, CE Soc Representative to IEEE Brain Initiative & Sensors Council,
USA

Prof. Yuri Shelepin, Pavlov Institute of Physiology, St. Petersburg, IEEE Brain Initiative,
Russia

Prof. Konstantin Glasman, IEEE Consumer Electronics Society Video/Multimedia
Chair; St. Petersburg State Institute of Film and Television, Russia

ORGANIZING COMMITTEE

Grinenko Evgenia, St. Petersburg State Institute of Film and Television, St. Petersburg, Russia

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Kozhevnikova Elena, Pavlov Institute of Physiology, Russian Academy of Sciences, Russia

Shelepin Evgeny, Pavlov Institute of Physiology, Russian Academy of Sciences, IEEE Brain Initiative, Russia

Shelepin Konstantin, Pavlov Institute of Physiology, Russian Academy of Sciences, Neuroiconics-Neuromechanics Co. Ltd., St. Petersburg, IEEE Brain Initiative, Russia

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Yakimova Elena, Pavlov Institute of Physiology, Russian Academy of Sciences, IEEE Brain Initiative, Russia

Zhukova Olga, Pavlov Institute of Physiology, Russian Academy of Sciences, IEEE Brain Initiative, Russia

PROGRAM COMMITTEE

Fokin Vladimir Russian V.A.Almazov National Medical Research Center, St. Petersburg, Russia

Kropotov Yuri Human Brain Institute of Behtereva Russian Academy of Sciences, St. Petersburg, Russia

Malakhova Ekaterina, Pavlov Institute of Physiology, Russian Academy of Sciences, IEEE Brain Initiative, Russia

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Trufanov Gennadiy Russian V.A.Almazov National Medical Research Center, St. Petersburg, Russia

Yakimova Elena, Pavlov Institute of Physiology, Russian Academy of Sciences, IEEE Brain Initiative, Russia

Zashchirinskaia Oksana, St-Petersburg State University, St-Petersburg, Russia.

Zhukova Olga. Pavlov Institute of Physiology, Russian Academy of Sciences,, St. Petersburg, IEEE Brain Initiative, Russia

Tuesday, May 29, 2018

Location: Makarova emb. 6, Conference hall, Pavlov Institute of
Physiology

10.00-14.00 Registration participants for **IEEE International Symposium «Video and audio signal processing in the context of Neurotechnologies», SPCN-2018**

Location: Makarova emb. 6, Avant Hall, Pavlov Institute of Physiology

from
13:00

**We invite participants to visit our collection station
EEG/EOG data at the SPCN conference in anonymously
experiment work with new inMEx equipment**

Poster session NEUROTECHNOLOGY

May 29, 30, 31, 2018

From 10.00 – 16.00

Location: Makarova emb. 6, Entrance Hall, and Avant Hall

Moderators: Vasilev Petr, Drozdov Sergey,
Pavlov Institute of Physiology, St. Petersburg, Russia
IEEE Brain Initiative

- 1 Abylgazy A., Kurbanova T., Maslova V., Kim E., Grachev H. Development and testing of usability interface (ITMO University, St.-Petersburg, Russia)
- 2 Abylgazy A., Kurbanova T., Kim E., Grachev H.. On the forecasting of the gender and age structure of the population (ITMO University, St.-Petersburg, Russia)
- 3 Altay Y., Kremlev A. Estimation of signal-to-noise ratio and mean square error based on sequential filtering approach for cardiac cycle tones (ITMO University, St.-Petersburg, Russia)
- 4 Atamanova A. Perception of facial expressions (St. Petersburg State University, Russia)
- 5 Agaeva M. Moving Signal localization in presence of stationary Masker in free field (Pavlov Institute of Physiology, St.-Petersburg, Russia)
- 6 Becten J. Serotonin. Hormone of Happiness (ITMO University, St.-Petersburg, Russia)
- 7 Cherenkova L. Time dynamics of the priming effect in the heterosensory interaction in children of preschool age (St.-Petersburg State University)
- 8 Erofeeva K. Mechanisms for decision-making. Neuromarketing (ITMO University, St.-Petersburg)

- Russia)
- 9 Glebko I. Psychophysiology of reading (St. Petersburg State University, Russia)
 - 10 Gryaznova A. The EEG study of ambiguous images (St. Petersburg State University, Russia)
 - 11 Kazakova A. Decision theory and dopamine (ITMO University, St.-Petersburg, Russia)
 - 12 Konoplev Yu., Mazunin K., Bakharev L., Kphasasov A., Vasques D. TuSion: five approaches for neurogaming. Mechanics that lie between art and BCI (N.P. Bechtereva Institute of the Human Brain of the RAS)
 - 13 Kovaleva V. Emotional component of alternative communication in adolescents (St. Petersburg State University, Russia)
 - 14 Kuzenkova A., Tuktarova V., Kovalskaya A., Koskin S. The first experience of visual acuity screening using smartphones (Military medical Academy, St.-Petersburg, Russia)
 - 15 Magomedova V. How does serotonin affect our desire to make impulsive purchases? (ITMO University, St.-Petersburg, Russia)
 - 16 Marinichev N., Lavrov A. Evaluation of the working area of the motion capture system Optitrack Prime13 (ITMO University)
 - 17 Mikhalkin A., Merkul'yeva N. Development of the Y cells of the cat lateral geniculate nucleus in relation to the visuotopic map (Pavlov Institute of Physiology RAS, St.-Petersburg, Russia)
 - 18 Petropavlovskaya E., Kanakhina L, Shestopalova L. The position of the standard stimulus affects the interhemispheric asymmetry of the auditory evoked potential in humans (Pavlov Institute of Physiology, St.-Petersburg, Russia)
 - 19 Petrov O. Music and the human brain (ITMO University, St. Petersburg, Russia)
 - 20 Romanova-Afrikantova N. Child Development of Visual Perception (ITMO University, St-Petersburg, Russia)
 - 21 Serikkazhiyeva R. City population dynamics prediction based on artificial neural networks (ITMO University, St. Petersburg, Russia)
 - 22 Shabanova I. Models and methods of decision-making under conditions of uncertainty (ITMO University, St.Petersburg, Russia)
 - 23 Shmatkov V., Oripova A., Bezbakh Y. Heterogenic Systems for Maintaining Climate Control in Museum Environment (ITMO University)
 - 24 Shilin P. Migraine: description, physiology, experiments (St. Petersburg State University, Russia)
 - 25 Skuratova K. Influence of alternative communication on the understanding of texts by children with dyslexia (St. Petersburg State University, Russia)
 - 26 Surkhayev T. Daniel Kahneman and Daniel Bernoulli: what is common and what is the difference (St. Petersburg State University, Russia)
 - 27 Tolstova E., Durovin K., Murav'eva S. The effects of physical activities vs. virtual reality on psychophysical state of the subject (Pavlov Institute of Physiology, Russian Academy of Sciences, IEEE Brain Initiative, Russia)
 - 28 Tolstukhina O. Paraphoveal processing in reading (St. Petersburg State University, Russia Pavlov Institute of Physiology, St.-Petersburg, Russia)
 - 29 Tuktarova V., Kovalskaya A., Koskin S. Visual acuity testing using high spatial frequency limit (Military medical Academy, St.Petersburg, Russia)
 - 30 Voronova E. Emotions in the process of decision-making by a person (ITMO University, St.Petersburg, Russia)
 - 31 Yakovenko A. Unsupervised Identification of Sound Stimuli with AWGN by the Impulse Activity of the Auditory Nerve Model (Peter the Great St. Petersburg Polytechnic University)
 - 32 Zhumasheva Zh., Altay Y., Kremlev A. Cluster analysis of sequential processing speech signals (ITMO University, Kazakh National Research Technical University named after K.I. Satpayev, Almaty, Kazakhstan)

Wednesday, May 30, 2018

Location: Makarova emb. 6, Avant Hall,
Pavlov Institute of Physiology

09.00-10.00	Registration for Symposium participants
10.00-11.00	Symposium Official opening ceremony

Welcome word from organizers

Ludmila Filaretova,

corresponding member of the Russian Academy of Science, Director of the Pavlov Institute of Physiology, St.-Petersburg, Russia

Mikhail Ostrovsky,

academician of the Russian Academy of Sciences, President of Pavlov Physiological Society, Moscow, Russia

Nan Chu Narisa,

CE Soc Representative to IEEE Brain Initiative & Sensors Council, USA

Invited Lectures

11:00-11:45 **Mikhail Ostrovsky and Mikhail Kirpichnikov**

Institute of Biochemical Physics, Russian Academy of Sciences, Russia
Institute of Bioorganic chemistry, Russian Academy of Sciences, Russia
Lomonosov Moscow State University, Russia

Optogenetics and prospects of restoration of vision

11:45-12:30 **Arnold Wilkins**

Professor, Department of Psychology University of Essex Colchester, UK

Predicting visual discomfort

12:30-13:30 Coffee break & Lunch time

13:30-14:15 **Miriam Reiner**

Professor, in Science and Technology, Israel Institute of Technology, IL

Human machine symbiosis with brain smart interface

14:15-15:00 **Denis Pelli**

New York University, Cognition & Perception, Center for Neural Science,
Center for Brain Imaging

Some clues as to how the human brain recognizes objects

15.00-15.45 **Baingio Pinna**,
 Professor of Experimental Psychology, University of Sassari, Department of
 Biomedical Sciences
Illusory shadows from motion

Thursday, May 31, 2018

Location: Makarova emb. 6, Conference hall,
 Pavlov Institute of Physiology

Plenary session 1	Moderators: Ogorodnikova Elena , Pavlov Institute of Physiology, Russian Academy of Sciences, Malakhova K. Pavlov Institute of Physiology, Russian Academy of Sciences, IEEE Brain Initiative, Russia
09:00-09:30	Narisa Nan Chu CE Soc Representative to IEEE Brain Initiative & Sensors Council, USA Digital Intelligence in Internet of Things
09:30-10:00	Nikolay Krasilnikov, Olga Krasilnikova St-Petersburg State University of Aerospace Instrumentation (SUAI), St. Petersburg, Russia Stereo vision: physiology and neurotechnology
10:00-10:30	Vadim Lutsiv S. I. Vavilov State Optical Institute, Petersburg, Russia Synchronization in the neural networks
10:30-11:00	Po-Lei Lee, Hao-Teng Hsu and Kuo-Kai Shyu Department of Electrical Engineering, National Central University, Taiwan EEG Analysis and Brain Computer Interface
11:00-11:30	Danilova Marina, Mollon Jhon Pavlov Institute of Physiology, St.-Petersburg, Russia The neural basis of sensory comparison – Gnostic units, cell ensembles or a cerebral bus?
11:30-11:45	Coffee break

Talk session 1 Neural networks and digital data processing

Moderators: **Lutsiv Vadim** , S. I. Vavilov State Optical Institute, Petersburg, Russia; **Malyshev Igor**, S. I. Vavilov State Optical Institute, Petersburg, Russia

- 11:45-12:00 **Alekseeva D., Babenko V., Yavna D.**
Southern Federal University, Rostov-on-Don
Use of spatial modulations of brightness gradients in the categorization of visual images
- 12:00-12:15 **Chizhov A.**
The Ioffe Institute, St.-Petersburg, Russia
Sechenov Institute of Evolutionary Physiology and Biochemistry of RAS, St.-Petersburg, Russia
Mathematical model of primary visual cortex: orientation and direction selectivity, effects of appearing motion and stimulus retention
- 12:15 -12:30 **Malakhova K.**
Pavlov Institute of Physiology, Russian Academy of Sciences, IEEE Brain Initiative, Russia
Neurotechnology. Image recognition and modeling the response of neurons in the inferotemporal cortex
- 12:30 -12:45 **Malashin R.**
Pavlov Institute of Physiology, Russian Academy of Sciences, IEEE Brain Initiative, Russia
Semi-global optimization of deep neural network
- 12:45-13:00 **Marusina M., Karaseva E.**
ITMO University, St.-Petersburg, Russia
Magnetic Resonance Images Processing Based on Automatic Segmentation and Fractal Analysis
- 13:00-13:15 **Maslova V., Kozlov V., Grachev H., Kim E., Kurbanova T.**
ITMO University, St-Petersburg, Russia
The research on methods of a skeletization of the digitized biometric data by using OpenCV technology
- 13:15-13:30 **Ponomarev S.**
Pavlov Institute of Physiology, St.-Petersburg, Russia
ITMO University, St.-Petersburg, Russia
Object Detection via Structural Matching of 3D Image Data
- 13:30-13-45 **Ponomarev S., Malashin R., Moiseenko G., Shelepin Yu.**
Pavlov Institute of Physiology, St.-Petersburg, Russia
Automatic classification of visual stimuli based on EEG signal processing

- 13:45-14:00 **Pronin S.**
Pavlov Institute of Physiology, Russian Academy of Sciences, IEEE Brain Initiative, Russia
An algorithm for detection artificial objects on natural backgrounds
- 14:00-14:15 **Romanov S., Kaplun D., Gulvansky V., Voznesensky A.**
The First Electrotechnical University (ETU «LETI»), St. Petersburg, Russia
Approach to reducing the amount of data in the tasks of hydroacoustic monitoring based on machine learning
- 14:15-14:30 **Korableva O., Erofeeva K.**
ITMO University, St-Petersburg, Russia
Neural networks in economic research
- 14:30-14:45 **Molchanov N., Korableva O., Muraveva O., Galai N.**
ITMO University, St.-Petersburg, Russia
Application of neurotechnologies in marketing
- 14:45-15:30 Coffee break & Lunch time

Talk session 2 Biological neural networks investigations
Moderators: **Fokin Vladimir** Russian V.A. Almazov National Medical Research Center, St. Petersburg, Russia; **Krasnoshchekova Elena**, St-Petersburg State University, St. Petersburg, Russia

- 15:30-15:45 **Alekseenko S., Shkorbatova P.**
Pavlov Institute of Physiology, St.-Petersburg, Russia
Differences and similarity of changes in crossed and uncrossed retinal pathways during development of different types of amblyopia
- 15:45-16:00 **Andreeva I., Gvozdeva A., Ogorodnikova E.**
Sechenov Institute of Evolutionary Physiology and Biochemistry, Russian Academy of Sciences, St. Petersburg, Russia
Pavlov Institute of Physiology, St. Petersburg, Russia
Temporal resolution under perception of the sound source movement with the model signals simulating a sensorineural hearing loss
- 16:00-16:15 **Maltsev D., Kulikov A., Burnasheva M.**
Military medical Academy of S.M. Kirov, St.-Petersburg, Russia
Optical coherence tomography is a non-invasive approach to planning laser treatment of retinal diseases

- 16:15-16:30 **Merkulieva N. Michalkin A.**
Pavlov Institute of Physiology, St.-Petersburg, Russia
Transitional formations of the visual thalamus: stratification of the layers of the external geniculate body
- 16:30-16:45 **Merkulieva N. Bondar I.**
Pavlov Institute of Physiology, St.-Petersburg, Russia
Development of visual cortex modules: optical mapping data
- 16:45-17:00 **Schemeleva O., Zhukova O., Moiseenko G., Vasiljev P.P., Shelepin, Y.**
St-Petersburg State University, St. Petersburg, Russia
Pavlov Institute of Physiology, St. Petersburg, Russia
The total EEG measuring during dialogue as a mirror of the neuronal net activity during verbal and nonverbal communication
- 17:00-17:15 **Shelepin K., Vasiljev P., Trufanov G., Fokin V., Sokolov A.**
Pavlov Institute of Physiology, St.-Petersburg, Russia
National Medical Research Center V.A. Almazov, St. Petersburg, Russia
The Cognitive Neurophysiology of Insight
- 17:15-17:30 **Zhukova O., Shelepin Y., Vasiljev P., Fokin V., Sokolov A., Trufanov G.**
Pavlov Institute of Physiology, St.-Petersburg, Russia National Medical Research Center. VA Almazov, St. Petersburg, Russia
Neurophysiological mechanisms of face perception
- 17:30-17:45 **Zykin P.** St. Petersburg State University, Russia MRI and histological mapping of the medial temporal region of the human brain

Friday, June 1, 2018

Location: Makarova emb. 6, Conference hall,
Pavlov Institute of Physiology

Plenary session 2	Moderators: Zashchirinskaia Oksana , St-Petersburg State University, St-Petersburg; Babenko Vitaly , Southern Federal University, Rostov-on-Don, Russia
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- 09:00-09:30 **Alexander Tybilov**
ITMO University, St.-Petersburg, Russia

Comparison of the absolute sensitivity of the eye adapted to darkness and the eye equipped with a night vision camera

- 09:30-10:00 **Jan Ober**
Laboratory for Oculomotor Research, Department for Biophysical Measurements and Imaging, Polish Academy of Sciences Warsaw, Poland
Saccadometry-the global approach
- 10:00-10:30 **Elena Krasnoshchekova**
St-Petersburg State University, St. Petersburg, Russia
Ontogeny of the periallocortex and its role in the genesis of neurodegenerative diseases
- 10:30-11:00 **Elmira Panahova (Gashimova UF, Pashkevich SG, Mironova GP, Zamaro AA, Dzhavadova AR)**
Institute of Physiology of National Academy of Sciences of Azerbaijan
Study of visually controlled behavior of white rats in the Morris water maze with olfactory bulbectomy
- 11:00-12:00 Coffee break & Lunch time

Talk session 3 Neural networks psychophysiological investigations

Moderators: **Chikhman Valeriy**, Pavlov Institute of Physiology, St. Petersburg, Russia **Zhukova Olga**, Pavlov Institute of Physiology, St. Petersburg, Russia, IEEE Brain Initiatives;

- 12:00-12:15 **Bondarko V., Chikhman V.**
Pavlov Institute of Physiology, St. Petersburg, Russia
Comparison of visual illusions with known mechanisms of perception
- 12:15-12:30 **Egorova M.**
I.M. Sechenov Institute of Evolutionary Physiology and Biochemistry, Russian Academy of Sciences
Complex sound processing by multip peaked neurons in brain auditory centers
- 12:30-12:45 **Harauzov A., Varovin I., Ivanova L., Podvigina D.**
Pavlov Institute of Physiology, St.-Petersburg, Russia
Electrical activity of the monkey's brain in performing visual spatial tests
- 12:45-13:00 **Ivanova L., Podvigina D., Varovin I., Harauzov A.**
Pavlov Institute of Physiology, St.-Petersburg, Russia
Investigation of monkeys' reaction time in performing tasks of varying difficulty

- 13:00-13:15 **Ivanova V., Vaiseytreiger A.S.-R.**
St-Petersburg State University, St. Petersburg, Russia
Comparative dynamics of human experience emotions neurophysiological markers at the time of conscious and uncounscious perceptions sensory information
- 13:15-13:30 **Kamyshev N., Bragina Ju, Danilenkova L., Besedina N., Goncharova A., Fedotov S.**
Pavlov Institute of Physiology, St.-Petersburg, Russia
Automated analysis of Drosophila pulse song
- 13:30-13:45 **Kanakhina L., Petropavlovskaia E., Shestopalova L.**
Pavlov Institute of Physiology, St. Petersburg, Russia
Lateralization of the human brain activity during preattentive discrimination of auditory motion
- 13:45-14:00 **Kaplun D., Boboshko M., Ogorodnikova E., Garbaruk E.**
The First Electrotechnical University (ETU «LETI»), St. Petersburg, Russia;
Academician I.P. Pavlov First St. Petersburg State Medical University;
Pavlov Institute of Physiology, St. Petersburg, Russia
Information system for the development of speech hearing and memory in adult hearing aid users
- 14:00-14:15 Coffee break
- Lamminpia A.**
Pavlov Institute of Physiology, St.-Petersburg, Russia
- 14:15-14:30 Costs of kinetic energy of the visual system during working with different types of stimuli
- 14:30-14:45 **Moiseenko G.**
Pavlov Institute of Physiology, St.-Petersburg, Russia
Effect of learning on the evoked potentials characteristics in classification tasks
- 14:45-15:00 **Murav'eva S.**
Pavlov Institute of Physiology, St. Petersburg, Russia
Influence of virtual environment with small and large images on the magno- and parvo- pathways of the visual system of patients with schizophrenia
- 15:00-15:15 **Ogorodnikova E., Gvozdeva A., Andreeva I.**
Pavlov Institute of Physiology, St. Petersburg, Russia
Sechenov Institute of Evolutionary Physiology and Biochemistry of Russian Academy of Sciences
Temporal resolution under perception of the sound source movement with

the model signals simulating a sensorineural hearing loss

- 15:15-15:30 **Podvigina D., Varovin I., Ivanova L., Harauzov A.**
Pavlov Institute of Physiology, St. Petersburg, Russia
Evoked potentials in rhesus monkeys in response to face presentation
- 15:30-15:45 **Semenova V., Shestopalova L., Petropavlovskaya E., Nikitin N.**
Pavlov Institute of Physiology, St. Petersburg, Russia
Perception thresholds for sound stimuli with delayed motion onset
- 15:45-16:00 **Shelepin E.**
Pavlov Institute of Physiology., St. Petersburg, IEEE Brain Initiative, Russia
Reading text in the content
- 16:00-16:15 **Vakhrameeva O., Kovalskaya A., Maltsev D., Koskin S., Shelepin Yu.**
Foveola and foveolar avascular zone diameters predicts the contrast sensitivity in high-band spatial frequency domain
Pavlov Institute of Physiology, St.-Petersburg, Russia
- 16:15-16:30 **Yakimova E.**
The perception of the color gradient and the McCollough effect
Pavlov Institute of Physiology, St.-Petersburg, Russia
- 16:30-16:45 **Yavna D., Babenko V. Alekseeva D.**
Southern Federal University, Rostov-on-Don, Russia
Pattern of eye movements when perceiving spatial modulations of textures
- 16:45-17:00 **Zashchirinskaia O., Shelepin E.**
St.-Petersburg State University, St.-Petersburg, Russia
Childrens and adolescents visual communication
- 17:00-17:15 **Zhukova O. Shelepin Yu., Schemeleva O., Moiseenko G., Vasiljev P.**
St.-Petersburg State University, St.-Petersburg, Russia
Pavlov Institute of Physiology, St.-Petersburg, Russia
Spectral analysis of brain response during verbal and non-verbal communication

Saturday, June 2, 2018

Location: Makarova emb. 6, Conference hall,
Pavlov Institute of Physiology

Plenary session 3	Moderators: <u>Boiko Ernest</u> , S. Fyodorov Eye microsurgery federal state institution, St.-Petersburg, Russia; <u>Trufanov Gennady</u> , Russian V.A. Almazov National Medical Research Center, St. Petersburg, Russia
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10:00-10:30 **Ernest Boiko**
S. Fyodorov Eye microsurgery federal state institution
Optical Coherent Tomografy

10:30-11:00 **Marina Zueva and Javi Otero**
Moscow Russia, Ltd Center of Neurocognitive Technologies "Cognito",
Moscow Helmholtz Research Institute of Eye Diseases
Theel, Oviñana, Spain
Training of the Brain by Applying the Complex-Structured Optical and Sound Signals

11:00-11:30 **Zak P, Rjabceva A.**
Institute of Biochemical Physics, Region clinical hospital, Moscow, Russia
Physiological quality criteria office LED lighting

Talk session 4	Clinical research activity of neural networks Moderators: <u>Murav'eva S.V</u> S. Pavlov Institute of Physiology, St.-Petersburg, Russia; <u>Efimtsev Alexander</u> , Russian V.A. Almazov National Medical Research Center, St. Petersburg, Russia
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11:30-11:45 **Aleksandrov A., Uplisova K., Ivanova V.**
St. Petersburg State University, Russia
Psychophysiological approaches to the automated assessment of emotional states

11:45-12:00 **Balyakova A., Shelepin K., Shelepin E.**
Pavlov Institute of Physiology, St. Petersburg, Russia
Neuroiconics Assistive Co. Ltd., St. Petersburg, IEEE Brain Initiative, Russia
Alternative communication and practice of its application

12:00-12:15 **Boboshko M., Garbaruk E. Golovanova L., Ogorodnikova E.**
Academician I.P. Pavlov First St. Petersburg State Medical University

- Saint-Petersburg Geriatric Medico-social center, Municipal Audiology Center, St. Petersburg, Russia
Pavlov Institute of Physiology, St. Petersburg, Russia
Manifestations of central auditory disorders and the effectiveness of hearing aids
- 12:15-12:30 **Koroleva I., Levin S., Pak S., Ogorodnikova E.**
Herzen State Pedagogical University of Russia, St. Petersburg
Saint-Petersburg Research Institute of Ear, Throat, Nose and Speech
Pavlov Institute of Physiology, St.-Petersburg, Russia
Modern technologies in hearing care (rehabilitation experience)
- 12:30-12:45 **Koskin S.**
Military medical Academy of S.M. Kirov, St.-Petersburg, Russia
Possible errors when using various methods of visometry
- 12:45-13:00 **Kovalskaya A., Koskin S., Shelepin Y., Pronin S., Harausov A., Vahrameeva O.**
Military medical Academy of S. M. Kirov, St-Petersburg, Russia
The eye tracking possibilities in visual acuity measurement
- 13:00-13:15 **Lyakso E., Frolova O., Grigorev A., Kurazhova A., Nikolaev A., Gorodny V.**
St. Petersburg State University, Russia
Audio (speech) and video data for studying the communicative skills of atypically developing children: a new approach
- 13:15-13:30 **Moiseenko G., Pronin S., Shelepin Yu.**
Pavlov Institute of Physiology, St.-Petersburg, Russia
New methods of assessing visual acuity
- 13:30-13:45 **Murav'eva S., Shelepin Y.**
Pavlov Institute of Physiology, St. Petersburg, Russia
Application of Neurotechnologies with interactive virtual environment for the correction of disturbances of cognitive function in patients with schizophrenia
- 13:45-14:00 **Naumov K., Tarumov D., Vorobyev S., Lobzin V., Kolmakova K.**
Military medical Academy, St.Petersburg, Russia
St. Petersburg State Pediatric Medical University
Neuronal networks investigation approaches in nervous system diseases and mental disorders
- 14:00-14:15 **Ogorodnikova E., Shantrukova O., Moshonkina T., Sukhotina I., Stolyarova E.**
Pavlov Institute of Physiology, St. Petersburg, Russia;
Academician I.P. Pavlov First St. Petersburg State Medical University

The influence of physical rehabilitation on the characteristics of verbal and non-verbal communication of children with cerebral palsy

14:15-14:30

Stetsenko A.

Rutgers University, Newark, New Jersey, USA

Modelling ripple oscillations as pyramidal neurons-interneurons interactions

Official Closing of the Conference!