

PROGRAM

Monday, June 26

12:45 – 13:15	Registration of participants on the pier
13:30	TRANSFER BY BOAT (pier № 3) Nizhny Novgorod – Resort hotel “Chayka”
16:00 – 17:30	Check in and accommodation of participants Resort hotel “Chayka”
18:00 – 18:30	Opening remarks (Hall A) Olga Petrova , Deputy Minister of Science and Higher Education of Russia David Melik-Guseinov , Deputy Governor of the Nizhny Novgorod Region (to be confirmed) Irina Kizilova , Minister of Education and Science of the Nizhny Novgorod Region Oleg Trofimov , Rector, Lobachevsky State University of Nizhny Novgorod Nikita Avraley , Vice-Rector for Strategic Development, Lobachevsky State University of Nizhny Novgorod Mikhail Gryaznov , Vice-Rector for Research and Innovation, Lobachevsky State University of Nizhny Novgorod Konstantin Anokhin , Prof., Academician of the Russian Academy of Sciences, Moscow State University
18:30 – 19:20	Plenary lecture (Hall A) MECHANISMS OF POSTURE AND LOCOMOTOR CONTROL INTEGRATION IN NORMAL AND PATHOLOGICAL CONDITIONS Pavel Musienko Pavlov Institute of Physiology Russian Academy of Sciences, St.Petersburg; St. Petersburg State University, St. Petersburg; Sirius University of Science and Technology, Sochi
19:45 – 22:30	Welcome reception (Hall C)

7:00 – 9:30	Breakfast	
10:00 – 10:50	<p>Plenary lecture (Hall A) NRF2 AS A CONDUCTOR OF BRAIN SURVIVAL ORCHESTRA Andrey Abramov UCL Queen Square Institute of Neurology, London, United Kingdom; Orel State University named after I.S. Turgenev, Orel</p>	
10:50 – 11:10	<p>SPONSORSHIP REPORT (Hall A) PRESENTATION OF THE INNOVATIVE AND TECHNOLOGICAL SYSTEM OF THE NIZHNY NOVGOROD REGION Alexander Tarasenko Research and Educational Center of the Nizhny Novgorod region (REC) Olga Kutyaeva Quantum Valley ISTC</p>	
11:20 – 11:50	<p>Conference session (Hall A) Molecular and Cellular Neuroscience Chairs – Prof. Victor Tarabykin and Prof. Maria Lagarkova</p>	<p>Conference session (Hall B) Neurotechnologies and Neuroelectronics Chair –Dr. Alexey Mikhaylov</p>
	<p>iPS-BASED MODELS OF NEURODEGENERATIVE DISEASES Maria Lagarkova Lopukhin Federal Research and Clinical Center of Physical-Chemical Medicine, Moscow</p>	<p>2D AND 3D MODELS OF BIOLOGICAL NEURAL NETWORKS Irina Mukhina Privolzhsky Research Medical University, Nizhny Novgorod</p>

11:50 – 12:10	<p>GENOMIC STUDIES OF NEUDEGENERATION IN PARKINSON'S DISEASE, ASSOCIATED WITH GLUCOCEREBROSODASE DYSFUNCTION ON CELL AND ANIMAL MODELS</p> <p>Sofya Pchelina Petersburg Nuclear Physics Institute named by B.P. Konstantinov of National Research Centre «Kurchatov Institute», Gatchina</p>	<p>NOVEL NEUROMORPHIC ARCHITECTURES BASED ON CROSSBAR ARRAYS OF $(\text{Co-Fe-B})_x(\text{LiNbO}_3)_{100-x}$ NANOCOMPOSITE MEMRISTORS</p> <p>Andrey Emelyanov Kurchatov Institute, Moscow</p>		
12:10 – 12:30	Coffee break			
12:30 – 14:00	<p>Conference session (Hall A) Molecular and Cellular Neuroscience</p>		<p>Conference session (Hall B) Neurotechnologies and Neuroelectronics</p>	
	12:30 – 12:50	<p>IS ALTERATION OF ERK1/2 AND P38MAPK SIGNALING PATHWAYS ACTIVITY A GENERAL MECHANISM OF AD AND AMD DEVELOPMENT?</p> <p>Natalia Muraleva Institute of Cytology and Genetics, Siberian Branch of Russian Academy of Sciences, Novosibirsk</p>	12:30 – 13:00	<p>SITUATION-BASED NEUROMORPHIC MEMORY IN SPIKING NEURON-ASTROCYTE NETWORK</p> <p>Susanna Gordleeva Lobachevsky University, Nizhny Novgorod</p>

	12:50 – 13:10	<p>THE RAT BRAIN TRANSCRIPTOME: FROM INFANCY TO AGING AND SPORADIC ALZHEIMER'S DISEASE-LIKE PATHOLOGY</p> <p>Natalia Stefanova Institute of Cytology and Genetics, Siberian Branch of Russian Academy of Sciences, Novosibirsk</p>	13:00 – 13:20	<p>ANALYSIS OF HEART RATE INDICES AT DIFFERENT LEVELS OF SLEEPINESS</p> <p>Valeriia Demareva Lobachevsky University, Nizhny Novgorod</p>
	13:10 – 13:30	<p>ELECTRON KEY TO THE ASTROCYTES SECRETS</p> <p>Vadim Rogachevsky Pushchino Scientific Center for Biological Research of the Russian Academy of Science, Pushchino</p>	13:20 – 13:50	<p>THE USE OF MEMRISTIVE DEVICES IN MACHINE VISION SYSTEMS</p> <p>Sergey Shchanikov Murom Institute Vladimir State University, Murom</p>
	13:30 – 13:50	<p>APPROACHES TO MODELING PARKINSON'S DISEASE CAUSED BY THE G2019S MUTATION IN THE LRRK2 KINASE IN AN ISOGENIC CELL MODEL</p> <p>Olga Lebedeva Lopukhin Federal Research and Clinical Center of Physical-Chemical Medicine, Moscow</p>	13:50 – 14:10	<p>NITROGEN DOPED CARBON NANOTUBES FOR SELF-POWERED MEMRISTIVE SYSTEMS</p> <p>Marina Il'ina Southern Federal University, Rostov-on-Don</p>
14:00 – 15:00	Lunch			

15:00 – 15:30	Conference session (Hall A) Molecular and Cellular Neuroscience	Conference session (Hall B) Neurotechnologies and Neuroelectronics
	<p>LIFE AFTER TRANSCRIPTION: CONTROL OF THE FATE OF NEURONS Victor Tarabykin Lobachevsky University, Nizhny Novgorod</p>	<p>NEUROELECTRONICS - NEUROMORPHIC AND NEUROHYBRID SYSTEMS ENABLED BY MEMRISTIVE TECHNOLOGY Alexey Mikhaylov Lobachevsky University, Nizhny Novgorod</p>
15:30 – 15:50	<p>GENE PLAUR IN THE BRAIN – FROM MORPHOGENESIS TO GUIDED REGENERATION Ekaterina Semina Immanuel Kant Baltic Federal University, Kaliningrad</p>	<p>RESERVOIR COMPUTING SYSTEM BASED ON VOLATILE AND NON-VOLATILE ORGANIC MEMRISTORS AS A PROMISING HARDWARE ARCHITECTURE Anna Matsukatova Kurchatov Institute, Moscow</p>
15:50 – 16:10	<p>CHEMOGENETIC EMULATION OF INTRANEURONAL OXIDATIVE STRESS AFFECTS SYNAPTIC PLASTICITY Dmitry Maltsev Federal Center of Brain Research and Neurotechnologies of the Federal Medical Biological Agency, Moscow</p>	<p>DESIGN OF A MEMRISTOR-BASED NEURON FOR SPIKING NEURAL NETWORKS Valerii Ostrovskii and Denis Butusov Electrotechnical University "LETI", St. Petersburg</p>
16:10 – 16:30	<p>OXYSTEROL-DEPENDENT PATHWAY OF REGULATION OF SYNAPTIC TRANSMISSION IN THE NEUROMUSCULAR JUNCTION OF MICE Guzalia Zakyrganova Kazan Institute of Biochemistry and Biophysics of Kazan Science Center of Russian Academy of Sciences; Institute of Neuroscience of Kazan State Medical University, Kazan</p>	<p>DESIGN OF SPIKING NEURAL NETWORK ARCHITECTURE BASED ON DENDRITIC COMPUTATION PRINCIPLES Ivan Mavrin and Natalia Andreeva Electrotechnical University "LETI", St. Petersburg</p>

<p>16:30 – 16:50</p>	<p>SPHINGOMYELINASE AS MODULATOR OF NEUROMUSCULAR TRANSMISSION VIA PRESYNAPTIC MECHANISM Alexey Petrov Kazan Institute of Biochemistry and Biophysics of Kazan Science Center of Russian Academy of Sciences, Kazan</p>	
<p>16:50 – 17:10</p>	<p>Coffee break</p>	
<p>17:10 – 17:25</p>	<p>SPONSORSHIP REPORT (Hall A) FROM COUNTING TO QUALITATIVE ANALYSIS OF NEURONS: OPTICAL SYSTEMS FOR CELL BIOLOGY Olga Gusikhina BioLine LLC, St. Petersburg</p>	
<p>17:25 – 18:15</p>	<p>Plenary lecture (Hall A) PRINCIPLES OF ANALOG NEUROMORPHIC COMPUTING: FROM COMPONENTS TO SYSTEMS AND ALGORITHMS Vyacheslav Demin Kurchatov Institute, Moscow</p>	
<p>18:15 - 19:15</p>	<p>Dinner</p>	
<p>19:45 – 23:00</p>	<p>Science Fail Night (Hall D)</p>	

7:00 – 9:30	Breakfast	
10:00 – 10:50	<p>Plenary lecture (Hall A) SYNCHRONIZATION AND DESYNCHRONIZATION MODES IN AN ADAPTIVE NETWORK OF KURAMOTO OSCILLATORS Vladimir Nekorkin A.V. Gaponov-Grekhov Institute of Applied Physics of the Russian Academy of Sciences, Nizhny Novgorod</p>	
10:50 – 11:10	<p>SPONSORSHIP REPORT (Hall A) FROM A TO X: NEW CONFOCAL SYSTEM FEATURES FROM "NIKON" Igor Kireev A.N. Belozersky Research Institute of Physical and Chemical Biology, Moscow State University, Moscow</p>	
11:20 – 11:50	<p>Conference session (Hall A) Systems and Cognitive Neuroscience Chair – Prof. Susanna Gordleeva</p>	<p>Conference session (Hall B) Neuroplasticity, Learning and Memory Chair – Prof. Pavel Balaban</p>
	<p>NEUROPHYSIOLOGICAL MARKERS THAT LINKS GENES AND BEHAVIOUR IN HUMANS Olga Sysoeva Sirius University of Science and Technology, Sirius</p>	<p>THE ROLE OF HETEROSYNAPTIC PLASTICITY IN THE MODIFICATION OF SENSORY RESPONSES OF MOUSE VISUAL CORTEX NEURONS Alexey Malyshev Institute of Higher Nervous Activity and Neurophysiology of Russian Academy of Sciences, Moscow</p>

11:50 – 12:20	<p>MATURATION OF INTERHEMISPHERIC ASYMMETRY OF LOCAL CORTICAL RESPONSES TO ABSTRACT AND CONCRETE VERBS: A MAGNETIC MISMATCH NEGATIVITY STUDY</p> <p>Anna Shestakova HSE University, Moscow</p>	<p>"NEW" SOURCE OF EXCITATION IN THE "OLD" HIPPOCAMPUS</p> <p>Andrei Rozov Federal Center of Brain Research and Neurotechnologies of the Federal Medical Biological Agency, Moscow</p>
12:20 – 12:40	Coffee break	
12:40 – 13:00	<p>Conference session (Hall A) Systems and Cognitive Neuroscience</p>	<p>Conference session (Hall B) Neuroplasticity, Learning and Memory</p>
	<p>NEURAL MECHANISMS OF ASSOCIATIVE CORTICAL PLASTICITY IN COGNITIVE DOMAIN: MAGNETOENCEPHALOGRAPHIC STUDIES</p> <p>Boris Chernyshev Moscow State University of Psychology & Education, Moscow</p>	<p>ENGRAM FOR THE COMPLEX SIGNALS IN THE MOUSE BRAIN: DISTINCT NEURONAL ENSEMBLES FOR COMPOUND CONDITIONING STIMULUS AND ITS COMPONENTS</p> <p>Olga Ivashkina Institute for Advanced Brain Studies Lomonosov Moscow State University, Moscow</p>
13:00 – 13:20	<p>EMOTION REGULATION: A STUDY OF ELECTROENCEPHALOGRAPHIC CORRELATES</p> <p>Vladimir Kosonogov HSE University, Moscow</p>	<p>CRITICAL TIME WINDOWS FOR THE KINASE-PHOSPHATASE SWITCHING UNDER AMYLOID AGGREGATES EFFECTS ON THE LONG-TERM POTENTIATION IN HIPPOCAMPAL SYNAPSES</p> <p>Alexander Maltsev Institute of Higher Nervous Activity and Neurophysiology of Russian Academy of Sciences, Moscow</p>

<p>13:20 – 13:40</p>	<p>EXPLORING STRUCTURAL BRAIN ATYPICALITIES IN CHILDREN WITH OBSTETRIC BRACHIAL PLEXUS PALSY: A VOXEL-BASED MORPHOMETRY ANALYSIS</p> <p>Victoria Moiseeva HSE University, Moscow</p>	<p>BENZOPYRAN DERIVATIVE PENETRATES THE BLOOD–BRAIN BARRIER, ELIMINATES SYNAPTIC DEFICIENCY AND RESTORES MEMORY DEFICIT IN 5XFAD MICE</p> <p>Elena Popugaeva Peter the Great St. Petersburg Polytechnic University, St. Petersburg</p>
<p>13:40 – 14:00</p>	<p>MODEL OF COGNITIVE ACTIVITY OF THE HUMAN BRAIN BASED ON THE MATHEMATICAL APPARATUS OF QUANTUM MECHANICS</p> <p>Alexandr Petukhov Keldysh Institute of Applied Mathematics of Russian Academy of Sciences, Moscow</p>	<p>RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE COMPONENTS AND FUNCTIONAL HEMISPHERIC ACTIVITY IN PATIENTS WITH CORONARY HEART DISEASE</p> <p>Olga Razumnikova Novosibirsk State Technical University, Novosibirsk</p>
<p>14:00 – 14:20</p>	<p>NEUROPHYSIOLOGY OF CREATIVITY IN CONDITIONS OF COMPETITIVE SOCIAL INTERACTION: DATA OF EEG HYPERSCANNING STUDY</p> <p>Zhanna Nagornova Sechenov Institute of Evolutionary Physiology and Biochemistry of the Russian Academy of Sciences, St. Petersburg</p>	<p>ACTIVITY OF THE CA1 NEURONS OF THE HIPPOCAMPUS DURING FORMATION AND REACTIVATION OF AVERSIVE MEMORY IN MICE IN VIVO</p> <p>Alyona Zuzina Institute of Higher Nervous Activity and Neurophysiology of Russian Academy of Sciences, Moscow</p>
<p>14:20 – 15:20</p>	<p>Lunch</p>	

15:20 – 15:50	<p>Conference session (Hall A) Neurodynamics, Computational Neuroscience and Artificial Intelligence Chair – Prof. Grigory Osipov</p>
	<p>NEUROMORPHIC CYBERNETICS Victor Kazantsev Lobachevsky University, Nizhny Novgorod</p>
15:50 – 16:10	<p>NEUROPHYSIOLOGY OF CREATIVITY AND MACHINE LEARNING APPLICATIONS FOR CREATIVE PROCESS' STAGES DIFFERENTIATION ON BASE OF EEG/ERP FEATURES Natalia Shemyakina Sechenov Institute of Evolutionary Physiology and Biochemistry of the Russian Academy of Sciences, St. Petersburg</p>
16:10 – 16:30	<p>OPEN-SOURCE SOFTWARE FOR DENDRITIC SPINES SEGMENTATION, CLASSIFICATION AND CLUSTERING Ekaterina Pchitskaya Peter the Great St. Petersburg Polytechnic University, St. Petersburg</p>
16:30 – 16:50	<p>CYCLOPS STATES IN REPULSIVE THETA-NEURON NETWORKS Maxim Bolotov Lobachevsky University, Nizhny Novgorod</p>
16:50 – 17:10	<p>Coffee break</p>
17:10 – 17:40	<p>DYNAMICS OF NEURON-ASTROCYTIC NETWORKS Mikhail Ivanchenko Lobachevsky University, Nizhny Novgorod</p>
17:40 – 18:00	<p>DYNAMICS IN THE REDUCED MEAN-FIELD MODEL OF NEURON-GLIAL INTERACTION Tatiana Levanova Lobachevsky University, Nizhny Novgorod</p>

18:00 – 18:30	DYNAMICS OF OSCILLATOR POPULATIONS GLOBALLY COUPLED WITH DISTRIBUTED PHASE SHIFTS Lev Smirnov Lobachevsky University, Nizhny Novgorod
18:30 – 18:50	SYNCHRONIZATION IN MULTIPLEX NETWORK WITH HIGH-ORDER INTERACTIONS Tetyana Lapteva Lobachevsky University, Nizhny Novgorod
19:00 – 19:50	Plenary lecture (Hall A) MERGING NONLINEAR DYNAMICS, GRAPHS AND ARTIFICIAL INTELLIGENCE: SYNOLITIC NETWORKS AND NOISE-INDUCED AI Alexey Zaikin Lobachevsky University, Nizhny Novgorod
19:50 - 20:40	Dinner
20:40 – 23:00	Poster session (Hall C)

7:00 – 9:30	Breakfast	
10:00 – 10:50	Plenary lecture (Hall A) PHYSIOLOGY AND PHARMACOLOGY OF TRACE AMINES AND THEIR RECEPTORS Raul Gainetdinov St. Petersburg State University, St. Petersburg	
10:50 - 11:05	SPONSORSHIP REPORT (Hall A) RESEARCH OF BRAIN SLICES: FROM SAMPLE PREPARATION TO 3D VISUALIZATION Darya Dyakova BioLine LLC, St. Petersburg	
11:10 – 11:40	Conference session (Hall A) Translational and Clinical Neuroscience Chair – Prof. Vsevolod Belousov	Conference session (Hall B) Neurophotonics and Optogenetics Chairs – Prof. Alexey Malyshev and Dr. Ilya Fedotov
	ZEBRAFISH MODELS IN MODERN NEUROSCIENCE Allan Kalueff St. Petersburg State University, St. Petersburg; Sirius University of Science and Technology, Sirius	IMPLANTABLE GRADED-INDEX FIBERS AS A TOOL FOR NEURALDYNAMICS-RESOLVING BRAIN IMAGING AND STIMULATION IN AWAKE MICE Ilya Fedotov Lomonosov Moscow State University, Moscow
11:40 – 12:10	SYNTHETIC BIOLOGY TOOLS FOR NEUROMODULATION AND METABOLIC REPROGRAMMING Vsevolod Belousov Federal Center of Brain Research and Neurotechnologies of the Federal Medical Biological Agency, Moscow	CROSSTALK OF CGMP AND CAMP IN THE VERTEBRATE PHOTOTRANSDUCTION CASCADE Michael Firsov Sechenov Institute of Evolutionary Physiology and Biochemistry of the Russian Academy of Sciences, St. Petersburg

12:10 – 12:30	Coffee break	
12:30 – 12:50	Conference session (Hall A) Translational and Clinical Neuroscience	Conference session (Hall B) Neurophotonics and Optogenetics
	DIFFERENTIATION THERAPY AS A NEW MULTIDISCIPLINARY APPROACH TO THE TREATMENT OF HUMAN BRAIN GLIOMA Galina Pavlova Institute of Higher Nervous Activity and Neurophysiology of Russian Academy of Sciences, Moscow, N.N. Burdenko National Medical Research Center of Neurosurgery, Moscow	RECORDING CHANGES IN BIOCHEMICAL PARAMETERS IN VIVO IN THE ISCHEMIC STROKE MODEL Yulia Khramova Lomonosov Moscow State University, Moscow
12:50 – 13:10	DIAGNOSTIC APPROACHES FOR PRECISION MEDICINE IN EPILEPSY Alexei Ossadtchi HSE University, Moscow	STUDY OF THE INFLUENCE OF IONIZING RADIATION ON THE SCATTERING PROPERTIES OF THE WHITE MATTER OF THE BRAIN Ksenia Achkasova Privolzhsky Research Medical University, Nizhny Novgorod
13:10 – 13:30	NEURONAL SIGNATURES OF ABNORMAL GLOBUS PALLIDUS ACTIVITY IN PATIENTS WITH PARKINSON'S DISEASE AND DYSTONIA Alexey Sedov N.N. Semenov Federal Research Center for Chemical Physics Russian Academy of Sciences, Moscow	MOLECULAR TARGETS FOR OPTOGENETIC STIMULATION OF ASTROCYTES FOR RECOVERING COGNITIVE FUNCTIONS IN NEUROLOGICAL COMPLICATION Olga Vlasova Peter the Great St. Petersburg Polytechnic University, St. Petersburg

<p>13:30 – 13:50</p>	<p>QUASI-MOVEMENTS AND ATTEMPTED MOVEMENTS: A POSSIBLE ALTERNATIVE TO MOTOR IMAGERY IN BCI-BASED NEUROREHABILITATION Sergei Shishkin Moscow State University of Psychology & Education, Moscow</p>	<p>OPTOGENETIC STIMULATION SUPPRESSES ICTAL ACTIVITY IN A 4-AMINOPYRIDINE MODEL OF EPILEPTIC ACTIVITY IN VITRO Aleksey Zaitsev Sechenov Institute of Evolutionary Physiology and Biochemistry of the Russian Academy of Sciences, St. Petersburg</p>
<p>13:50 – 14:10</p>	<p>CURRENT STRATEGIES FOR REGENERATIVE THERAPY OF SPINAL CORD INJURY Vladimir Baklaushev Federal Center of Brain Research and Neurotechnologies of the Federal Medical Biological Agency, Moscow</p>	<p>ANALYSIS OF THE HIPPOCAMPAL NEURAL NETWORK ACTIVITY IN VIVO BY MINIATURE FLUORESCENCE MICROSCOPY IN NEUROLOGICAL PATHOLOGIES Evgenii Gerasimov Peter the Great St. Petersburg Polytechnic University, St. Petersburg</p>
<p>14:10 – 15:10</p>	<p>Lunch</p>	
<p>15:10 – 17:10</p>	<p>Conference session (Hall B) CONSCIOUSNESS AND THEORETICAL NEUROSCIENCE Chair – Prof. Konstantin Anokhin</p>	
<p>17:10 – 17:30</p>	<p>Coffee break</p>	
<p>17:30 – 17:50</p>	<p>Sponsorship report (Hall A) FEMTO3D ATLAS AND ACOUSTO-OPTICS: NEVER SEEN BENEFITS IN MULTIPHOTON MICROSCOPY Tamas Tompa, Femtonics</p>	
<p>17:50 – 18:40</p>	<p>Plenary lecture (Hall A) DO NEURAL NETWORKS NEED TO SLEEP? Maksim Bazhenov Department of Medicine, University of California, San Diego, USA</p>	

18:40 - 19:40	Dinner
20:30 – 21:00	Closing ceremony (Hall A)
21:00 – 00:00	Gala dinner

Friday, June 30

7:00 – 10:00	Breakfast
12:00	Transfer to Nizhny Novgorod

POSTER SESSION

Section

Systems and Cognitive Neuroscience

- 1. THE ROLE OF MIRROR SYSTEM IN INFLUENCING THE VALENCE EVALUATION OF 'WORDS' – A TRANSCRANIAL MAGNETIC STIMULATION (TMS) STUDY**
Behera Sangram, HSE University, Moscow
- 2. NEUROPHYSIOLOGICAL MECHANISMS OF EXPLORATION AND EXPLOITATION IN HIGH-FUNCTIONING AUTISM: MEG STUDY**
Chernyshev Boris, Moscow State University of Psychology & Education, Moscow
- 3. NEURAL OSCILLATORY CORRELATES OF MOTOR VIGOR: AN MEG STUDY**
Ivanova Marina, HSE University, Moscow
- 4. COGNITIVE DECLINE AND AFFECTIVE ALTERATIONS IN SCA2-58Q MICE**
Marinina Ksenia, Peter the Great St. Petersburg Polytechnic University, St. Petersburg
- 5. TEMPORAL DYNAMICS OF THE MIRROR NEURONS EFFECT AND ITS STIMULI DEPENDENT MODULATION: A TRANSCRANIAL MAGNETIC STIMULATION STUDY**
Nieto Doval Carlos, HSE University, Moscow
- 6. NETWORK TOPOLOGY OF HUMAN BRAIN FUNCTIONAL CONNECTIVITY IN WORKING MEMORY TASK PROCESSING**
Onuchin Arsenii and Ernston Iliia, Lomonosov Moscow State University, Moscow
- 7. WORKING MEMORY: WHAT STUDIES TELL US ABOUT OSCILLATIONS AND FUNCTIONAL CONNECTIVITY**
Ostavnov Nikita and Voevodina Ekaterina, HSE University, Moscow
- 8. TRANSSPINAL DIRECT CURRENT STIMULATION WITH INTENSITY 2,5 MA DOES NOT AFFECTS THE CORTICOSPINAL SYSTEM EXCITABILITY AND MOTOR SKILLS**
Pomelova Ekaterina, Centre for Cognition & Decision Making, Institute for Cognitive Neuroscience, HSE University, Moscow

9. **INTENSITY OF TRANSSPINAL DIRECT CURRENT STIMULATION AFFECTS THE EXCITABILITY OF THE CORTICOSPINAL SYSTEM**
Popvyanova Alena, Centre for Cognition & Decision Making, Institute for Cognitive Neuroscience, HSE University, Moscow
10. **NEURAL TRACKING OF NATURAL SPEECH LISTENING IN CHILDREN: TEMPORAL RESPONSE FUNCTION (TRF) APPROACH**
Rogachev Anton, Sirius University of Science and Technology, Sirius
11. **EFFECTS OF TRANSCRANIAL MAGNETIC STIMULATION ON CORTICAL STRUCTURE ACTIVITY CHANGES DURING BRAIN-COMPUTER INTERFACE MOTOR IMAGERY PERFORMANCE**
Savosenkov Andrey, Lobachevsky University, Nizhny Novgorod
12. **HOW CAN QUASI-MOVEMENTS HELP US IN EXPLORING VOLUNTARY ACTION? NEUROSCIENCE, PSYCHOLOGY AND PHILOSOPHY PERSPECTIVES**
Yashin Artem, Centre for Cognition & Decision Making, Institute for Cognitive Neuroscience, HSE University, Moscow

Section

Translational and Clinical Neuroscience

13. **NEUROREHABILITATION OF POST-STROKE PATIENTS USING A NONINVASIVE SPINAL NEUROPROSTHESIS**
Ananov Sergey, I.P. Pavlov Institute of Physiology of the Russian Academy of Sciences, St. Petersburg, Ulyanovsk State University, Ulyanovsk
14. **THE USE OF NEUROTECHNOLOGIES IN THE COMPLEX TREATMENT OF CHILDREN WITH SEVERE DISORDERS OF THE UPPER LIMBS**
Blagovechtchenski Evgeny, H.Turner National Medical Research Center for Children's Orthopedics and Trauma Surgery, St. Petersburg
15. **MULTIFRACTAL CHARACTERISTICS OF NEURONAL ACTIVITY OF THE GLOBUS PALLIDUS IN PATIENTS WITH DYSTONIA**
Dzhalagoniya Indiko, N.N. Semenov Federal Research Center for Chemical Physics Russian Academy of Sciences, Moscow
16. **NEURAL ACTIVITY OF THE SUBTHALAMIC NUCLEUS DURING VOLUNTARY MOVEMENTS IN PATIENTS WITH PARKINSON'S DISEASE**
Filyushkina Veronika, N.N. Semenov Federal Research Center for Chemical Physics Russian Academy of Sciences, Moscow

- 17. ASYMMETRIC PARKINSON'S DISEASE MANIFESTATION IMPLIES DIFFERENCES IN SUBTHALAMIC NEURAL ACTIVITY PROPERTIES**
Pavlovsky Philip, N.N. Semenov Federal Research Center for Chemical Physics
Russian Academy of Sciences, Moscow
- 18. THE EFFICACY OF ANTITUMOR VACCINES BASED ON PHOTOINDUCED GL261 GLIOMA CELLS USING PHOTSENSITIZERS FROM THE GROUP OF TETRA(ARYL)TETRACYANOPORPHYRASES WITH DIFFERENT ARYL SUBSTITUENTS**
Redkin Tikhon, Lobachevsky University, Nizhny Novgorod
- 19. HOW STN ACTIVITY ANALYSIS COULD HELP TO IMPROVE DBS STIMULATION IN PARKINSON'S DISEASE**
Sayfulina Ksenia, N.N. Semenov Federal Research Center for Chemical Physics Russian Academy of Sciences, Moscow
- 20. AnanDYNAMICS OF FUNCTIONAL IMPAIRMENTS DURING FOCAL TRANSIENT ISCHEMIA IN THREE-DIMENSIONAL CORTICAL SPACE**
Zakharov Andrey, Kazan Federal University, Kazan
- 21. A POSITIVE ALLOSTERIC MODULATOR OF TRPC6 PROMOTES NEUROPROTECTIVE EFFECTS IN VITRO**
Zernov Nikita, Peter the Great St. Petersburg Polytechnic University, St. Petersburg

Section

Neuroplasticity, Learning and Memory

- 22. DEVELOPING AND TESTING A METHOD OF REMOTELY IMPROVING YOUNGER STUDENTS EXECUTIVE FUNCTIONS, VOLITIONAL ATTENTION AND AUDITORY MEMORY**
Bogdanova Margarita, Ural Federal University named after the first President of Russia B.N. Yeltsin, Yekaterinburg
- 23. BLOCKADE OF HISTONE DEACETYLASE ACTIVITY AFFECTS TRANSCRIPTION AND SPLICING OF NEURONAL AND GLIAL GENES**
Borodinova Anastasia, Institute of Higher Nervous Activity and Neurophysiology of Russian Academy of Sciences, Moscow
- 24. DEVELOPMENT OF A MODEL TO STUDY VISUAL CATEGORIZATION LEARNING IN CHICKENS (GALLUS GALLUS DOMESTICUS)**
Diffine Ekaterina, Institute for Advanced Brain Studies Lomonosov Moscow State University, Moscow

- 25. NEUROPLASTICITY AND THE DEVELOPMENTAL DYSLEXIA INTERVENTION**
Dorofeeva Svetlana, HSE University, Moscow
- 26. BEHAVIORAL PHENOTYPE OF C57BL/6 MICE THAT ENDURED BULLYING DURING INFANT AGE PERIOD**
Kuzmina Daria, Privolzhsky Research Medical University, Nizhny Novgorod
- 27. EFFECT OF SPREADING DEPOLARIZATION INDUCED BY AMYGDALA MICRO-INJURY ON FEAR MEMORY IN RATS**
Smirnova Mariia, Institute of Higher Nervous Activity and Neurophysiology of Russian Academy of Sciences, Moscow
- 28. WEAK CUED FEAR MEMORY STRENGTHENING BY RE-ACTIVATING THE ENGRAM**
Toropova Ksenia, Institute for Advanced Brain Studies Lomonosov Moscow State University, Moscow
- 29. HISTONE ACETYLATION INCREASE RESCUES A WEAK REMOTE FEAR MEMORY IN RATS**
Vinarskaya Aliya, Institute of Higher Nervous Activity and Neurophysiology of Russian Academy of Sciences, Moscow
- 30. HIGHLY STABLE LONG-TERM MEMORY IN A MOUSE MODEL OF POST-TRAUMATIC STRESS DISORDER**
Zamorina Tatyana, Institute for Advanced Brain Studies Lomonosov Moscow State University, Moscow
- 31. CENTRAL PATTERN GENERATORS FOR BIOMORPHIC ROBOTICS**
Zharinov Alexey, Lobachevsky University, Nizhny Novgorod

Section

Neurotechnologies and Neuroelectronics

- 32. DYNAMICS OF TWO NEURON-LIKE GENERATORS WITH MEMRISTIVE CONNECTION**
Bolshakov Denis, Lobachevsky University, Nizhny Novgorod
- 33. DEVELOPMENT OF A MICROELECTRODE FOR SIMULTANEOUS IN VIVO CALCIUM AND ELECTROPHYSIOLOGICAL RECORDING OF HIPPOCAMPAL NEURONAL ACTIVITY**
Erofeev Aleksandr, Peter the Great St. Petersburg Polytechnic University, St. Petersburg

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