



Program

of the IEEE International Symposium

**«Video and Audio Signal Processing in the Context of
Neurotechnologies»**

**June 30 – July 2
2016**

St. Petersburg, Russia

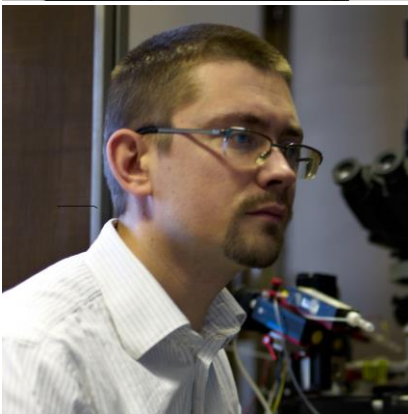
Invited Speakers



Miriam Reiner

Technion – Israel Institute of Technology, Haifa, Israel

**The potential power of media to enhance cognition:
The tacit components of human perception in
mediated worlds**



Ivan Pavlov

UCL Institute of Neurology, London, UK

**Regulation of neuronal excitability and network
behaviour by extracellular GABA**



Mauro Costagly

*IMAGO7, Laboratory of Medical Physics and Biotechnologies
for Magnetic Resonance, Stella Maris Hospital, Pisa, Italy*

**Signal Processing in MRI: new challenges with ultra-
high field 7T scanners**



Nikolay Krasilnikov

*St-Petersburg State University of Aerospace Instrumentation
(SUAI), St. Petersburg, Russia*

Stereo vision



Baingio Pinna

Dept. of Humanities and Social Sciences, University of Sassari

A new principle of chromatic accentuation in perceptual organization: visual, cognitive and biological implications with technological applications



Vladimir Otellin

Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, Russia

Developing brain and hypoxia



Manabu Tanifuji

Lab for Integrative Neural Systems, RIKEN, Tokyo, Japan

- 1. Searching for visual features driving face neurons in the higher visual cortex, inferior temporal cortex, in macaque monkeys**
- 2. Machineries for forming center and periphery of receptive fields in monkey anterior inferior temporal cortex**



Martin Salter

Educational Foundation of the International Association of Broadcasting Manufacturers (IABM), Reading, UK

The Role of the Consumer in Innovation or Innovating the Consumer

Program of the Symposium

June 30

- From 9.30 **Registration of the participants.**
Location: Makarova enb. 6, Conference hall
- 10.00-10.15 **Welcome word from organizers** - Ludmila Filaretova, Director of Pavlov Institute of Physiology, Russian Academy of Sciences
- 10.15-10.30 **Opening Address** - Konstantin Glasman, Chair, Video/Multimedia Committee, IEEE Consumer Electronics Society, Member of IEEE.tv Advisory Committee
- 10.30-10.45 **Neurotechnology for consumers** - Yuri Shelepin, Head of the laboratory of vision physiology, Pavlov Institute of Physiology, Russian Academy of Sciences
- 10.45-11.30 **The potential power of media to enhance cognition: The tacit components of human perception in mediated worlds.**
Miriam Reiner, Israel Institute of Technology, Haifa, Israel
- 11.30-12.15 **Regulation of neuronal excitability and network behaviour by extracellular GABA.**
Ivan Pavlov, UCL Institute of Neurology, London, UK
- 12.15-13.00 **Searching for visual features driving face neurons in the higher visual cortex, inferior temporal cortex, in macaque monkeys.**
Manabu Tanifuji, Lab for Integrative Neural Systems, RIKEN, Tokyo, Japan
- 13.00-14.30 Coffee break
Poster session

- | | |
|-------------|--|
| 14.30-16.10 | Talk session 1
Cognitive Science and Neurotechnologies: Neuroeconomics, Decision-making
Moderators: Vasily Klucharev, Anna Shestakova
Location: Makarova enb. 6, Conference hall |
|-------------|--|
- 14.30-14.50 **Introduction.** Vasily Klucharev and Anna Shestakova. Higher School of economics, Moscow, Russia
- 14.50-15.10 **The switch-risk task: evidence that volitional cognitive control load influences risky decision making.** Zachary A Yaple, Marie Chumakova, Alexis Belianin, Anna Shestakova & Vasily Klucharev. Centre for Cognition and Decision Making, National Research University Higher School of Economics, Moscow, Russia
- 15.10-15.30 **Neurobiological mechanisms of social punishment.** O.Zinchenko, V. Klucharev. Centre for Cognition and Decision Making, National Research University Higher School of Economics, Moscow, Russia
- 15.30-15.50 **Neural mechanisms of the postdecisional spreading-of-alternatives effect: EEG study.** Marco Colosio¹, Anna Shestakova¹, Vadim Nikulin^{1,2}, Nikita Novikov¹, Vasily Klucharev¹.
¹Centre for Cognition and Decision Making, National Research University Higher School of Economics, Moscow, Russia, ²Neurophysics Group, Department of Neurology, Charité Universitätsmedizin Berlin, Campus Benjamin Franklin, Hindenburgdamm 30, Berlin, Germany

- 15.50-16.10 **MEG correlates of internalization of social influence.** Aleksei Gorin¹, Ivan Zubarev², Anna Shestakova¹, Alexey Ossadtchi^{1,3}, and Vasily Klucharev¹. ¹Higher School of Economics National Research University Moscow, Russia, ²Aalto NeuroImaging, Aalto University, Espoo, Finland ³Institute of problems of mechanical engineering, Russian Academy of Sciences, St. Petersburg, Russia
- 16.10-16.30 Coffee break
- 16.30-17.20 **Stereo vision**
Nikolay Krasilnikov, St-Petersburg State University of Aerospace Instrumentation (SUAI), St. Petersburg, Russia
- | | |
|-------------|---|
| 17.20-18.30 | Talk session 2
Virtual Reality Environments in Technology and Clinics
Moderators: Vladimir Fokin, Lidia Shestopalova
Location: Makarova enb. 6, Conference hall |
|-------------|---|
- 17.20-17.40 **Mechanisms of Active and Passive Perception of 3D Virtual Environments.** Angelina Lesnikova^{1,2}, Sergey Pronin². ¹Saint Petersburg State University, ²Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, Russia
- 17.40-18.00 **Vection illusion in virtual reality.** Artem Kovalev. Lomonosov Moscow State University, Moscow, Russia
- 18.00-18.20 **Virtual technologies in medical visualization.** Vladimir Fokin, Alexander Efimtsev. Federal Almazov North-West Medical Research Centre, St. Petersburg, Russia
- 18.20-18.40 **The impact of spatial-frequency filtering to recognize of stimuli in healthy subjects and patients with schizophrenia (psychophysical and electrophysiological methods of investigation).** Svetlana Muraviova, Galina Moiseenko, Sergey Pronin, Evgeny Shelepin, Yuri Shelepin. Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, Russia
- 18.40-20.00 Welcome cocktail-party for the participants

July 1

- 10.00-11.00 **Machineries for forming center and periphery of receptive fields in monkey anterior inferior temporal cortex.**
Manabu Tanifuji
- 11.00-12.00 **A new principle of chromatic accentuation in perceptual organization: visual, cognitive and biological implications with technological applications.**
Baingio Pinna
- 12.00-13.00 **Signal Processing in MRI: new challenges with ultra-high field 7T scanners.**
Mauro Costagli
- 13.00-15.00 Coffee break
Poster session
- | | |
|-------------|---|
| 15.00-17.20 | Talk session 3
Cognitive Science and Neurotechnologies
Moderator: Alexandra Zamaro, Elena Yakimova |
|-------------|---|

Location: Makarova enb. 6, Conference hall

- 15.00-15.20 **Eye movements during recognition of facial expression of contradictory photo portraits.** Elizaveta Luniakova, Jahan Ganizada. Lomonosov Moscow State University, Moscow, Russia
- 15.20-15.40 **Design and analysis of large semantic networks.** Taisiya Lebedeva, Evgeny Kostyuchenko. Tomsk State University of Control Systems and Radioelectronics, Tomsk, Russia
- 15.40-16.00 **Influence of image size on localization areas of decision-making in classification tasks** Galina Moiseenko, Sergey Pronin, Valeriy Chikhman. Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, Russia
- 16.00-16.20 **Disorientation of rats after destruction of anterior olfactory nucleus.** Alexandra Zamaro, Yulia Stukach, Svetlana Pashkevich, Vladimir Kulchitsky. Interdepartmental Research Center for Artificial Intelligence, National Academy of Sciences of Belarus, Minsk, Belarus
- 16.20-16.40 **Motion performance of sound images with various rhythmic structures.** Alisa Gvozdeva, Irina Andreeva. Sechenov Institute of Evolutionary Physiology and Biochemistry RAS, St. Petersburg, Russia
- 16.40-17.00 **Recognition of verbal and nonverbal stimuli: the effect of familiarity.** Daria Podvigina, Veronika Prokopenya. Saint Petersburg State University, Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, Russia
- 17.00-17.20 **Video signal processing to study attention in crowding effect.** Valeria Bondarko, Marina Danilova, Sergey Solnushkin, Valeriy Chikhman. Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, Russia

15.00-19.00 Round table discussion 1.

Quantum neurobiology: myth or reality

Moderators: Mak A.A., Solovyov N.A., Shelepin Yu. E.

Location: Makarova enb. 6, Saint Petersburg State University, Department of Psychology, room 213

Quantum neurobiology: myth or reality? Solovyov N.A. National Innovation System, St. Petersburg, Russia

Human brain. Internal noise and decision making. Shelepin Y.E. Pavlov Institute of Physiology, Russian Academy of Sciences

Quantum Technologies : Going beyond "usual" physical researches". Alodjants A.P. ITMO University, St. Petersburg, Russia

Some analogies between peculiar characteristics of multimode lasers and biological objects. Danilov O. B., Rosanov N. N., Solovyov N. A., Soms L. N., Vavilov State Optical Institute, St. Petersburg, Russia

Towards Quantum Theory of Language. Dobrov¹ A.V., Soms² N.L. ¹Saint Petersburg State University, ²OOO "AIRE", St. Petersburg, Russia

Three ways to relate consciousness and quantum mechanics. Terekhov V. E. Institute of philosophy, Saint Petersburg State University, St. Petersburg, Russia

15.00-17.30 Round table discussion 2.

Cognitive Neurosciences in Economic Studies, Management and Education

Moderator: Olga Korableva.

Location: Birjevaya line, 14, room 310A.

Modern Education in the Context of Neurotechnologies. Valery Monakhov, Vladimir Orlov. Saint Petersburg State University, St. Petersburg, Russia

The case 'automobile' in the logics of neurotechnologies. Fedor Monakhov. Saint Petersburg State University, St. Petersburg, Russia

Adam Smith and Greed as a Sentiment. John Taylor. Southern Illinois University Edwardsville, Edwardsville, USA, Saint Petersburg State University, St. Petersburg, Russia

The study of market anomalies on the basis of the Efficient Market Hypothesis (EMH), and Fractal Market Hypothesis (FMH). Olga Korableva, Olga Kalimullina. ITMO University, St. Petersburg, Russia

fMRI research of the decision making process in uncertain condition. Olga Jukova (Borachuk). Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, Russia

Cognitive aspect of text analysis by undergraduate students. Oksana Zashchirinskaya, Konstantin Shelepin, E. Zamanovskaya, Saint Petersburg State University, St. Petersburg, Russia

Investigation of visual patterns in students with mental deficiency. Oksana Zashchirinskaya, Evgeni Shelepin, Saint Petersburg State University, St. Petersburg, Russia

July 2

- 10.00-10.45 **The Role of the Consumer in Innovation or Innovating the Consumer**
Dr. hc Martin Salter, C.Eng FIET. Director and Trustee of the Educational Foundation of the International Association of Broadcasting Manufacturers (IABM), Reading, UK
- 10.45-11.30 **Developing brain and hypoxia**
Vladimir Otellin, Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, Russia

11.30-13.30 Talk session 4
Neural Networks
Moderators: Elmira Panakhova, Katerina Malakhova
Location: Makarova emb. 6, Conference hall

- 11.30-11.50 **Mathematical model of the visual system. Vizeotopiya, field of vision – retina – V1.**
Pavel Vargin. JSC Television scientific research institute, Moscow, Russia
- 11.50-12.10 **Computational model of the second-order visual channels.** Denis Yavna, Vitaliy Babenko. Southern Federal University, Rostov-on-Don, Russia
- 12.10-12.30 **Biophysically detailed modeling of visual cortex in terms of neuronal populations.**
Anton Chizhov, Ioffe Institute, Saint-Petersburg, Russia
- 12.30-12.50 **To amygdalar control of perceptive function of visual system.** Elmira Panakhova, U.F. Hashimova, N.M. Rzayeva-Ismailovaa, Institute of Physiology named after Academician Abdulla Garayev, Baku, Azerbaijan
- 12.50-13.10 **Modeling convolutional neural network for text detection task.** Ekaterina Malakhova, Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, Russia
- 13.10-13.30 **Training Deep Neural Network for Accurate Age and Gender Recognition on Small Set of Data.** Roman Malashin, Nikita Anisimov, ITMO University, Vavilov State Optical Institute, St. Petersburg, Russia

13.30-15.00 Coffee break
Poster session

15.00-15.20 Talk session 5

Signal Processing

Moderator: Maria Marusina, Valeriy Chikhman

Location: Makarova enb. 6, Conference hall

- 15.00-15.20 **Review of data-smashing processing principle.** Yuri Konoplev. Human Brain Institute of the Russian Academy of Sciences, St. Petersburg, Russia
- 15.20-15.40 **Functional human brain mapping as a basement for some neurointerfaces.** Evgeny Blagovechensky, Higher School of Economics, Moscow, Russia; Laboratory of Neuroscience and Molecular Pharmacology, Institute of Translational Biomedicine, Saint Petersburg State University, St. Petersburg, Russia
- 15.40-16.00 **Postprocessing analysis of MRI.** Maria Marusina, ITMO University, St.Petersburg, Russia
- 16.00-16.20 **Comparison of singular photons detection sensitivity in human retinal receptive field and in artificial photodetectors matrixes.** Alexander Tibilov¹, V. Nesterov², Yuri Shelepin³. ¹Vavilov State Optical Institute, St. Petersburg, Russia, ²AO SILAR, ³Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, Russia
- 16.20-16.40 **Anisotropy in visual apparent motion.** Vladimir Kolbanov, Pavlov First Medical University, Department of physiology, St. Petersburg, Russia
- 16.40-17.00 **Violation of reading ability at high visual acuity after surgery for idiopathic macular hole.** Svetlana Sdobnikova, L. Sdobnikova, S. Makhotin. Helmholtz Institute of Eye Diseases, Moscow, Russia
- 17.00-17.20 **Measuring of the fovea and foveola using line scans and 3D Macular scans obtained with spectral domain optical coherent tomography.** Olga Vakhrameeva¹, Galina Moiseenko¹, Dmitry Maltsev², Mikhail Sukhinin², Sergey Koskin². ¹Pavlov Institute of Physiology, Russian Academy of Sciences. ²Department of ophthalmology; S. M. Kirov Military Medical Academy, St. Petersburg, Russia
- 17.20-17.40 **Anti-interference processing electrocardiosignals.** Dinara Shayakhmetkyzy¹, Eldos Altay², Daulen Koishibayev². ¹ITMO University, St.Petersburg, Russia, ²Kazakh National Research Technical University after K.I.Satpayev, Almaty, Kazakhstan
- 17.40-18.00 **The Speech Analysis Methods.** Elena Lyakso, Olga Frolova, Aleksey Grigorev, Valentina Sokolova, Kseniya Yarotskaya, Aleksandr Sapojnikov. Saint Petersburg State University, St. Petersburg, Russia
- 18.00-18.20 **A filter bank for suppression of speech signals.** Dinara Shayakhmetkyzy¹, Eldos Altay². ¹ITMO University, St.Petersburg, Russia, ²Kazakh National Research Technical University after K.I.Satpayev, Almaty, Kazakhstan
- 18.20-20.00 Goodbye party for the participants

Poster session

1. Agaeva M., Petropavlovskaya E. **Localization of the Lagged Moving Sound in the Precedence Effect Paradigm.** Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, Russia
2. Agaeva M., Petropavlovskaya E. **Precedence Effect for Moving Sounds in the Horizontal Plane.** Pavlov

- Institute of Physiology, Russian Academy of Sciences, St. Petersburg, Russia
3. Andreeva D.D., Zykin P.A. **Optical tissue clearing as a method to assess prenatal organization of human cortical plate in three dimensions.** Saint Petersburg State University, St. Petersburg, Russia
 4. Bozhokin S., Suslova I. **Spectral and phase correlation of eeg bursts ensemble: wavelet analysis.** Peter the Great Saint-Petersburg Polytechnic University, St. Petersburg, Russia
 5. Cherenkova L., Sokolova L. **Characteristics of visual processing in preschool children with typical and atypical development.** St. Petersburg National University, St. Petersburg, Russia
 6. Dobrego A., Petrova T. **Perception patterns of static and dynamic texts: An experimental study of Russian.** Saint Petersburg State University, St.Petersburg, Russia
 7. Doktorova T., Koskin S., Kovalskaya A. **Comparative analysis of visometry results obtained with optometric chart and image projector.** Department of ophthalmology; S. M. Kirov Military Medical Academy, St. Petersburg, Russia
 8. Doronin M., Popov A. **Development of modern two-photon microscope in use of neuroscience.** Institute of Neuroscience, Nizhny Novgorod State University, Nizhny Novgorod, Russia
 9. Dubovsky V., Rubakhova V., Savchenko V., Pashkevich S. **Simulation of upright body position in human on unstable support.** Joint Institute of Mechanical Engineering of the National Academy of Sciences of Belarus & Institute of Physiology of the National Academy of Sciences of Belarus
 10. Frolova Ekaterina **Approaches to the development of automatic segmentation method MRI-images.** ITMO University, St. Petersburg, Russia
 11. Golubov A. **Evaluation of emotional expressions viewers.** St.Petersburg State University of Film and Television, St. Petersburg, Russia
 12. Kiryackova T. **Approaches to the development of human brain mapping methods.** ITMO University, St. Petersburg, Russia
 13. Knyazev A., Shchekanov E. **Insect models of higher vertebrates behavior.** Sechenov Institute of Evolutionary Physiology and Biochemistry, Russian Academy of Sciences, St. Petersburg, Russia
 14. Knyazeva V., Aleksandrov A. **Acoustic stimuli duration and the development of muscle fatigue.** Saint Petersburg State University, St.Petersburg, Russia
 15. Kovalskaya, S. Koskin, Yu. Shelepin, S. Pronin, A. Harauzov, Vakhrameeva O. **Objective visual acuity measurement by infrared videoculography.** Department of ophthalmology; S. M. Kirov Military Medical Academy; Pavlov Institute of Physiology, Russian Academy of Sciences. St. Petersburg, Russia
 16. Krasilshchikova N., Menshikova G. **Interaction with a self-avatar while perceiving a mismatch between visual and proprioception information in virtual environments.** Lomonosov Moscow State University, Moscow, Russia
 17. Luniakova E., Pakhomova O. **An effect of the type of title on perception of photographs: An eye tracking study.** Lomonosov Moscow State University, Moscow, Russia
 18. Memetova K., Aleksandrov A., Stankevich L. **Influence of lexical context on mismatch negativity elicited by pseudowords processing.** Saint Petersburg State University, St.Petersburg, Russia
 19. Nedoshivina L., Peterson M. **Evaluation of deep features for global visual localization.** ITMO University, St. Petersburg, Russia
 20. Olga Lomtadidze, Anna Alekseeva, Irina Kolezneva. **Eye-tracking's comparison research of planar and volumetric images' perception among art orientation's students.** Ural Federal University (UrFU), Ural state academy of architecture and arts (USAAA), Ekaterinburg, Russia
 21. Petropavlovskaja E., Shestopalova L., Shkurko A., Semenova V., Nikitin N. **Human Brain Functional Asymmetry and Moving Sound Localization.** Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, Russia
 22. Pronin S., Shelepin Yu., Shoshina I. **The art and consumers with mental disorders.** Pavlov Institute

- of Physiology, Russian Academy of Sciences, St. Petersburg, Russia
23. Saveleva O., Zacharkin D., Menshikova G. **Spatial memory: the accuracy of allocentric and egocentric spatial representations.** Lomonosov Moscow State University, Moscow, Russia
 24. Saveleva O., Zacharkin D., Menshikova G. **The impact of avatar's ethnic appearance on proxemic behavior.** Lomonosov Moscow State University, Moscow, Russia
 25. Shelepin Yu., Shelepin E., Pronin S., Muraveva S., Yakimova E. **Neurotechnology for consumers with mental disorders.** Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, Russia
 26. Shelepin¹ E., Deiana² K. **The role of chromatic accentuation in Dyslexia: Useful implications for effective assistive technology.** ¹Dept. of Architecture, Design & Planning, Univ. of Sassari, Alghero, Italy, ²Dept. of Humanities & Social Sciences, Univ. of Sassari, Italy.
 27. Shestopalova L., Petropavlovskaya E., Semenova V., Vaitulevich S., Nikitin N. **The Fastest or The Slowest? Contextual effects on moving sound discrimination.** Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, Russia
 28. Shoshina^{1,2} I., Shelepin² Yu., Konkina¹ S., Sergienko¹ R. **The mechanisms of global and local image analysis in schizophrenia.** ¹Siberian Federal University, Krasnoyarsk, Russia; ²Pavlov Institute of Physiology, Russian Academy of Sciences, St.-Petersburg, Russia
 29. Smirnova¹ V., Andreeva¹ I., Bobrova² E., Gvozdeva¹ A., Antifeev³ I. ¹ **Postural reactions occurred as a result of listening of approaching and withdrawing footstep sounds.** Sechenov Institute of Evolutionary Physiology and Biochemistry RAS; ²Pavlov Institute of Physiology RAS, ³ Institute for Analytical Instrumentation RAS. St. Petersburg, Russia
 30. Yakimova¹ E., Chizhov^{2,3} A., Smirnova² E. **Biophysically detailed model of direction selectivity of visual cortex, based on population approach.** ¹Pavlov Institute of Physiology, Russian Academy of Sciences; ²Ioffe Institute, ³Sechenov Institute of Evolutionary Physiology and Biochemistry of RAS. St. Petersburg, Russia.
 31. Zhukova (Borachuk)¹ O., Shelepin² Y., Harauzov² A., Vasiljev² P., Vershinina² E. ¹St. **An fMRI study of brain activation in a visual adaptation task to the features of facial expression** Petersburg State University; ²Pavlov Institute of Physiology Russian Academy of Sciences. St. Petersburg, Russia

Satellite events

All the satellite events are organized by partners of SPCN 2016. The registration fee was collected separately for each satellite event by organizers of the event. Ones registered for SPCN 2016 or for one of its satellite events participant can attend all of the session listed in this program using his badge. The materials of SPCN 2016 and its satellite events will be published together in one book of abstracts. The list of all satellite events is available on the website of SPCN 2016 (<https://spcn2016.org/program/satellite-events/>).

I. Satellite workshop for undergraduate and graduate students **Digital and informational technologies in electronic media industry (June 29-July 1)**

The workshop will be held in Saint-Petersburg State University of Film and Television (<http://www.gukit.ru/adv/2016/05/xiv-nauchno-tehnicheskaya-konferenciya-i-konkurs-cifrovye-i-informacionnye-tehnologii-v>)

International Advisors:

M. Solter, International Association of Broadcasting Manufacturers,

S. Morits, Saint-Petersburg State University of Film and Television

K.F. Glasman, Saint-Petersburg State University of Film and Television

The full program will be available on the website of SPCN 2016 after June 25.

II. Satellite round-table discussion **Smart illumination and Life Systems (June 30-July 1)**

Round-table discussion is organized in the framework of the [NewLED](#) Workshop by the ITMO University International Research Center of Functional Materials and Devices of Optoelectronics and Electronics

Moderators:

E.U. Rafailov, Aston Univ., UK

G.S. Sokolovskii, Ioffe Inst., ITMO Univ., Russia

M.Ya. Marusina, ITMO University International Laboratory "Physics and technology of smart lighting"

The full program of this event is available on the website of SPCN 2016:

<https://spcn2016.org/9th-newled-consortium-meeting-program/>

III. Satellite session of the international conference Laser Optics: **"Semiconductor Lasers, Materials and Applications" (June 27- June 28)**

Moderators:

G. Huyet, Tyndall National Inst. and Cork Inst. of Techn., Ireland

E.U. Rafailov, Aston Univ., UK

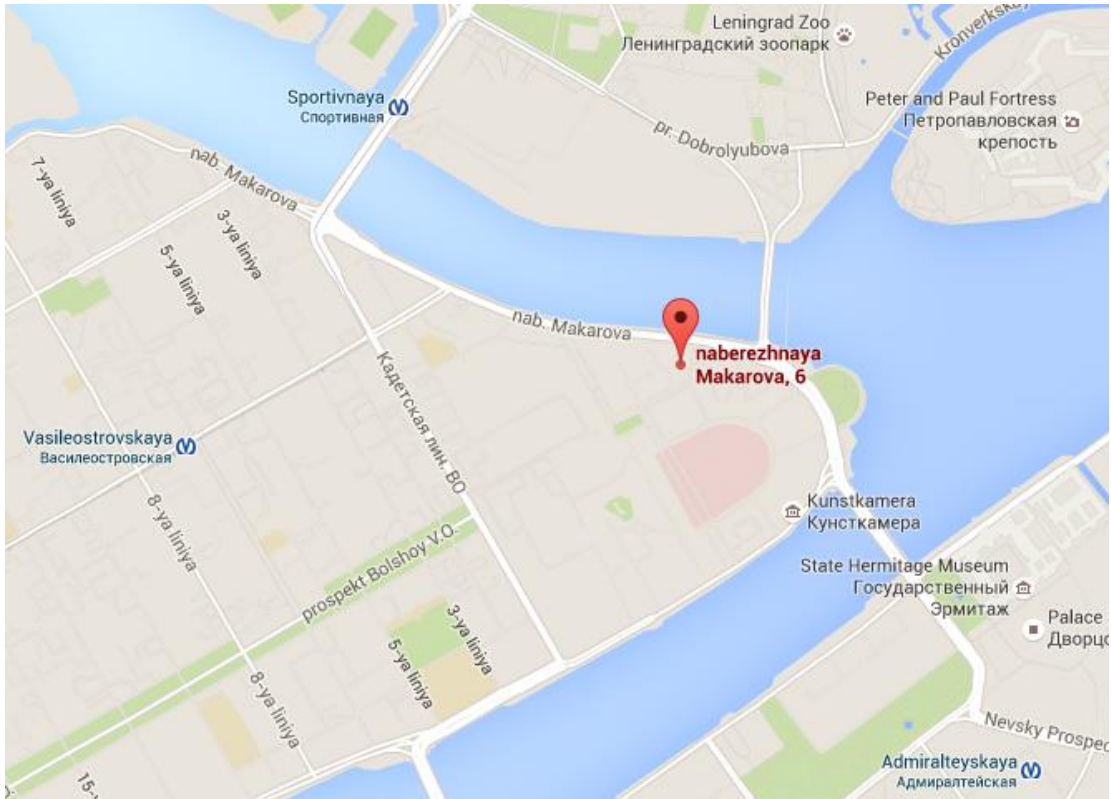
G.S. Sokolovskii, Ioffe Inst., ITMO Univ., Russia

The full program of this event is available on the website:

<http://www.laseroptics.ru/images/2016ap/200516/R3.pdf>

Maps

Location: Makarova enb. 6, closest metro stations: Admiralteyskaya, Sportivnaya (there is 300 meter travolator in the tunnel under Neva River, between Sportivnaya metro station and Makarova embankment), Vasileostrovskaya



Location: Birjevaya line, 14, room 310A

