



SPITSE 2016 Symposium Workshops and Summer School

Sense. Enable. SPITSE.

National Research University "Moscow Power Engineering Institute",
Moscow – Smolensk, Russia,
June 20th – 24th, 2016

Topics

- Novel technologies for RF, microwave, and optical sensors and devices
- Antennas for RF and microwave sensing
- Energy efficient frontends, wireless power transfer
- Smart sensors, sensor signal acquisition, HW/SW co-design
- Biomedical diagnostics
- Wireless devices and strategies for intelligent traffic systems (ITS)
- Nonlinear dynamic system modeling; analog/digital signal processing, dirty RF
- Wireless sensor networks, network security
- Data fusion and data mining
- Embedded software engineering

Symposium Research Track Program: June 20th – 24th, 2016

Monday, June 20th, 2016, Moscow

	Small Assembly Hall (SAH)
08 ₃₀	Transfer from Izmailovo Hotel to MPEI
09 ₃₀ - 10 ₀₀	Registration
10 ₀₀ - 11 ₀₀	Opening of the International Academic Forum AMO – SPITSE – NESEFF Welcome addresses: 1. Rector of MPEI, Professor Nikolai D. Rogalev 2. Head of the Science Department of the German Embassy Mr. Michael Dobis 3. Deputy head of the DAAD, Coordinator of the German House of Science and Innovation (DWIH) Dr. Martin Krispin 4. Director of Thuringian Centre of Innovation in Mobility, Professor TU Ilmenau, SPITSE Chairman Matthias A. Hein 5. President of Siemens Russia and Central Asia, Vice president of “Siemens AG” Dr. Dietrich Moeller
11 ₀₀ - 11 ₂₀	KEYNOTE 1: Dr. Dietrich Moeller, Siemens AG
11 ₂₀ - 11 ₅₀	Coffee Break
11 ₅₀ - 12 ₁₀	KEYNOTE 2: Dr. Martin Krispin, DAAD, DWIH Moscow
12 ₁₀ - 12 ₃₀	KEYNOTE 3: Prof. Matthias A. Hein, TU Ilmenau
12 ₃₀ - 12 ₅₀	KEYNOTE 4: Dr. Maria V. Pavlovskaya, LETI
12 ₅₀ - 13 ₁₀	KEYNOTE 5: Dr. Evgeniy G. Gasho, MPEI
13 ₁₀ - 13 ₃₀	Group photography of the International Academic Forum AMO – SPITSE – NESEFF participants
13 ₃₀ - 14 ₃₀	Lunch Break
14 ₃₀ - 14 ₅₀	KEYNOTE 6: Prof. Viktor V. Toporkov, MPEI
14 ₅₀ - 15 ₁₀	KEYNOTE 7: Dr. Artem V. Ryzhenkov, MPEI
15 ₁₀ - 15 ₃₀	KEYNOTE 8: Dr. Alexander A. Krolin, MPEI
15 ₃₀ - 15 ₅₀	KEYNOTE 9: Dr. Alexey S. Anuchin, MPEI
15 ₅₀ - 16 ₁₀	KEYNOTE 10: Dr. Alexander A. Voloshin, MPEI
16 ₁₀ - 17 ₃₀	Visits to research laboratories MPEI
17 ₃₀	Transfer to Izmailovo Hotel

Tuesday, June 21st, 2016

7 ₃₀	Transfer from Izmailovo Hotel to Smolensk
12 ₀₀ - 13 ₀₀	Visit to Borodino
13 ₀₀ - 15 ₀₀	Lunch Break
18 ₀₀ - 19 ₀₀	Arrival to Smolensk Hotel, accommodation of conferees in Smolensk Hotel
19 ₀₀	Free time

Wednesday, June 22nd, 2016, Smolensk

9 ₃₀	Transfer from Smolensk Hotel to MPEI branch	
	A-2	
10 ₀₀ - 11 ₃₀	Opening of the International Academic Forum AMO – SPITSE – NESEFF in Smolensk Welcome addresses: 1. Governor of the Smolensk region Ostrovsky A.V. 2. Rector of MPEI, Professor Nikolai D. Rogalev 3. MPEI branch director, Professor Alexander S. Fedulov 4. Vice-president of AMO O. Dukhlev, 5. Director of Thuringian Centre of Innovation in Mobility, Professor TU Ilmenau, SPITSE Chairman Matthias A. Hein 6. Professor MPEI, NESEFF representative, Vladimir V. Kulichikhin	
11 ₃₀ - 12 ₀₀	Coffee Break	
12 ₀₀ - 13 ₃₀		Round table "Network interaction of Universities, programs of two diplomas"
13 ₃₀ - 13 ₄₅	Group photography of the International Academic Forum AMO – SPITSE – NESEFF participants	
13 ₄₅ - 15 ₀₀	Lunch Break	
15 ₀₀ - 16 ₀₀	Excursion to MPEI Branch	
	SPITSE Session, A-2	Foyer
16 ₀₀ - 16 ₁₅	Hannes Toepfer, Marco Goetze, Elena Chervakova, Tino Hutschenreuther On the Use of Wireless Sensors Within a Traffic Monitoring System	Poster session
16 ₁₅ - 16 ₃₀	Kurt Blau, Debalina Chatterjee, Matthias A. Hein A Wide Dynamic Range Microwave Spectrum Sensor for Cognitive Radio	
16 ₃₀ - 16 ₄₅	S. Loracher, K. Blau, U. Stehr, R. Stephan, M. A. Hein Design Verification of a Passive, Tuneable, Transistor-based RF Inductance	
16 ₄₅ - 17 ₀₀	Alexander Krauss, Hendrik Bayer, Ralf Stephan, Matthias A. Hein A Leaky-Wave Antenna Based on a Dual-Layer Frequency Selective Surface for Mobile Satellite Communications in Ka-Band	
17 ₀₀ - 17 ₁₅	Alexander Ebert, Jens Müller, Ralf Stephan, Dirk Stöpel, Tobias Kässer, Willibald Konrath, Matthias A. Hein Compact Reconfigurable Industry-level Ka-band Switch Matrix Payload Module for Geostationary Satellite Operation	
17 ₁₅ - 17 ₃₀	Pavel Stremoukhov, Ansar Safin Operating characteristics of the vortex spin transfer nano-oscillator	
17 ₃₀ - 17 ₄₅	Christopher Schirmer, Marcus Grossmann, Alexander Rugamer, Markus Landmann, Mario Lorenz, Wolfgang Felber, Simon Taschke, Giovanni Del Galdo An Over-The-Air Wave Field Synthesis Testbed for Multi-GNSS Systems – Setup and Verification	
17 ₄₅ - 18 ₀₀	Elena Rozova, Bernd Däne An Approach to Model-Based Modification of Embedded Systems for a Specialized Soft Microprocessor	
18 ₀₀ - 20 ₀₀	Welcome Reception	
20 ₀₀	Transfer to Smolensk Hotel	

Thursday, June 23rd, 2016, Smolensk

8 ₃₀	Transfer from Smolensk Hotel to MPEI branch	
	SPITSE Session, A-2	Foyer
9 ₀₀ - 9 ₁₅	Vasilii Ganishev, Olga Fengler, Wolfgang Fengler Workflow management system for academic collaboration	Poster session
9 ₁₅ - 9 ₃₀	Merzlikina E.I., Andrushin A.V., Dolbikova N.S., Kiet S.V., Nikitina I.S. Reliability of sensors and measurement results in chemical monitoring systems	
9 ₃₀ - 9 ₄₅	Denis V. Leonov, V.A. Fin, N. S. Kulberg Experimental Study of Color Doppler Twinkling Artifact	
9 ₄₅ - 10 ₀₀	Elena Solovyeva Mathematical Methods For Synthesis Of Non-Gaussian Noise Nonlinear Filters	
10 ₀₀ - 10 ₁₅	E. Novikova, E. Fedotov, I. Murenin Detection of Anomalies In Individual And Group Movement Within Dynamic Environment	
10 ₁₅ - 10 ₃₀	D.M. Klionskiy, D.I. Kaplun, A.M. Golubkov, V.V. Gulvnskiy, M.S. Kupriyanov, R. Taha Al-Kasasbeh Signal classification in digital filter bank channels in radio monitoring and hydroacoustic monitoring tasks	
11 ₀₀ - 11 ₃₀	Coffee Break	
11 ₃₀ - 13 ₀₀	Round table "The Russian and Foreign experience of recognition of documents on education", Moderator Zhitnikova M.N.	
13 ₀₀ - 14 ₀₀	Lunch Break	
14 ₀₀ - 19 ₀₀	City tour around Smolensk	
19 ₀₀	Free time	

Friday, June 24th, 2016

8 ₄₅ - 10 ₀₀	Summing up and conference closing
11 ₀₀	Transfer from Smolensk Hotel to Moscow, excursion to the jewelry factory "Kristall" in Smolensk

Summer School Schedule: June 27th – July 1st, 2016

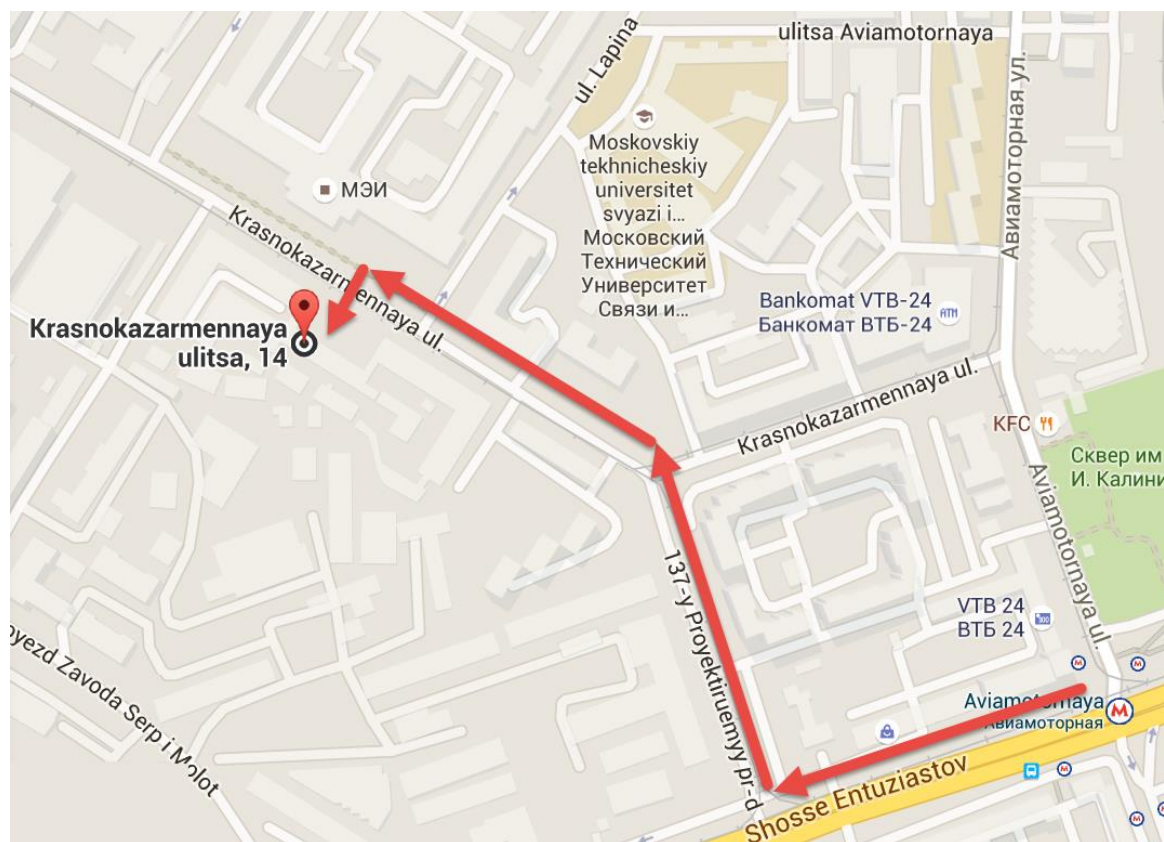
Day	Time	MPEI branch in Smolensk
Monday June 27 th	12 ⁰⁰ - 13 ⁰⁰	Introductory meeting
	13 ³⁰ - 14 ³⁰	Lunch Break
Tuesday June 28 th	10 ⁰⁰ - 11 ³⁰	Lecture: Dr. Krujeelov The mathematics of the 3D rotation
	11 ³⁰ - 12 ⁰⁰	Break
	12 ⁰⁰ - 13 ³⁰	Seminar: Dr.Krujeelov Numerical methods for engineering with MATLAB
	13 ³⁰ - 14 ³⁰	Lunch Break
	14 ³⁰ - 16 ⁰⁰	Research proposal preparation
Wednesday June 29 th	10 ⁰⁰ - 11 ³⁰	Lecture: Dr.Stoyanova Decision making support problems
	11 ³⁰ - 12 ⁰⁰	Break
	12 ⁰⁰ - 13 ³⁰	Seminar: Dr.Stoyanova Program instruments for decision making support
	13 ³⁰ - 14 ³⁰	Lunch Break
	14 ³⁰ - 16 ⁰⁰	Research proposal preparation
Thursday June 30 th	10 ⁰⁰ - 11 ³⁰	Lecture: Dr. Krujeelov The Quaternions with an application to the satellite guidance and computer graphics
	11 ³⁰ - 12 ⁰⁰	Break
	12 ⁰⁰ - 13 ³⁰	Seminar: Dr.Krujeelov Numerical methods for engineering with MATLAB
	13 ³⁰ - 14 ³⁰	Lunch Break
	14 ³⁰ - 16 ⁰⁰	Research proposal preparation
Friday July 1 st	10 ⁰⁰ - 13 ⁰⁰	Research Proposal Presentation Certificates awarding

The research proposal presentation includes preparation of the research proposal in group of 2-6 people. On the last day of the session each group will present the research proposal in front of a researcher panel.

Moscow

Krasnokazarmennaya Street, Building 14, 4th Floor, Small Assembly Hall

г. Москва, Красноказарменная улица, дом 14, 4 этаж, Малый актовый зал



Smolensk

Energeticheskij proezd, building 1

г. Смоленск, Энергетический проезд, дом 1

