

**Advanced Technologies for 4G (and Beyond) Air Interface**  
**May, 21-22**  
**Saint-Petersburg State University of Aerospace Instrumentation**  
**(SUAI)**

**P R O G R A M**

**21 May. Schedule of the day.**

**9.45 – 10.00 Meeting of participants near the central entrance of SUAI (St.Petersburg, B.Morskaya 67).**

**10.00 – 10.15 The official greeting of administration of Saint-Petersburg.** Aleksey Azarskov, Deputy Chief of Committee on information and communications.

**10.15 – 10.30 The official greeting of St.Petersburg State University of Aerospace Instrumentation.** Dr., Professor Anatoly Ovodenko, Rector.

**10.30 – 11.00 Tasks and the purposes of a seminar.** Dr., Professor Eugeny Kruk, the Dean of the Information Systems and Data Protection Faculty of the SUAI.

**11.00 – 12.00 Encoding for wireless communications systems.** Dr. Andrey Belogolovy, Senior Engineer, ZAO “Intel A/O”

**12.00 – 12.20 Coffee-brake.**

**12.20 – 13.30 Cooperative Communication where Network meets the Channel.** Prof. Behnaam Aazhang, Department of Electrical and Computer Engineering Center for Multimedia Communication, Rice University, Houston, TX USA

**13.30 – 14.30 Lunch.**

**14.30 – 15.00 WiMAX technology: simulation challenges and bridging the PHY gap**  
Lecturer: Alexander Sayenko, Nokia, Finland

**15.00 – 16.00 Messages.**

**Signature interleaving Code Division Multiple Access.** Alexey Dudkov, University of Turku.

**Efficient block error models for mobile communications.** Jussi Poikonen, University of Turku.

**High-Speed WPAN MAC Performance Evaluation and Enhancement.** Sergey Andreev, SUAI  
Konstantin Dubkov, SUAI

Ann Uhanova, SUAI

Il’ja Katcev, SUAI

**16.00 – 16.50 Seminar “Modified decoder of Alamouti space-time code”.** Aleksandr Kozlov, the chief of telecommunication laboratory of SUAI.

**17.00 – 19.00 Boat trip along rivers and channels of S.Petersburg.** Start from the Moika bank near the central entrance of SUAI (B.Morskaya 67).

**22 May. Schedule of the day.**

**10.00 – 10.30 Spectral-effective signals. Theory and practice.** Dr., Professor Sergey B.Makarov, Head of the Radio-Electronic Systems of Information Security Department of Saint-Petersburg State Polytechnical University.

**10.30 – 11.30 Wireless communications systems security.** Dr., Sergey Bezzateev, the Associated Professor of the Information Systems Security Department of the SUAI.

**11.30 – 12.00 MIMO decoder using QRD-M algorithm.** Ernst Zielinski, Nokia, Germany.

**12.00 – 12.20 Coffee-brake.**

**12.20 – 12.50 Vector processor study done for 3.9G project.** Holger Wirz, Nokia, Germany.

**12.50 -13.50 Perspective operated superhigh-frequency devices for telecommunication systems.** Kozirev, Dr., Professors of the Saint Petersburg Electrotechnical University (ETU).

**13.50 – 14.40 Lunch.**

**14.40 – 15.40 Seminar and demonstration of adaptive video-transmission system over wireless channel by the example of WiFi.**

**15.40 – 16.00 Coffee-brake.**

**16.00 – 18.00 Messages.**

**Comparison of channel models for evaluating the performance of mobile broadcasting systems** Piritta Hakala, University of Turku.

**Signature ensembles and receiver structures for oversaturated synchronous DS-CDMA systems.** Jarkko Paavola (Alexey Dudkov), University of Turku.

Andrey Rashich, State Polytechnical University (2 messages)

State Electrotechnical University (2 messages)

**Mobile Multimedia Broadcasting Technologies (EUREKA/Celtic projects Wing TV and B21C).** Jussi Poikonen, University of Turku.

**18.00 – 19.00 Summarizing of seminar. The Discussion about the joint Russian-Finnish educational and research project.**

**Coffee-brake.**

**19.00 – 20.30** A walking tour of the city center with visiting the Isaak Cathedral and the White Palace, the excursion to the Petro-Pavlovsky Fortress and Saint-Petersburg.

**23 May. Schedule of the day.**

**12.00 – 15.00**

**Messages.**

**Discussions at the laboratories of SUAI.**

**Discussion about next steps in the university cooperation program.**