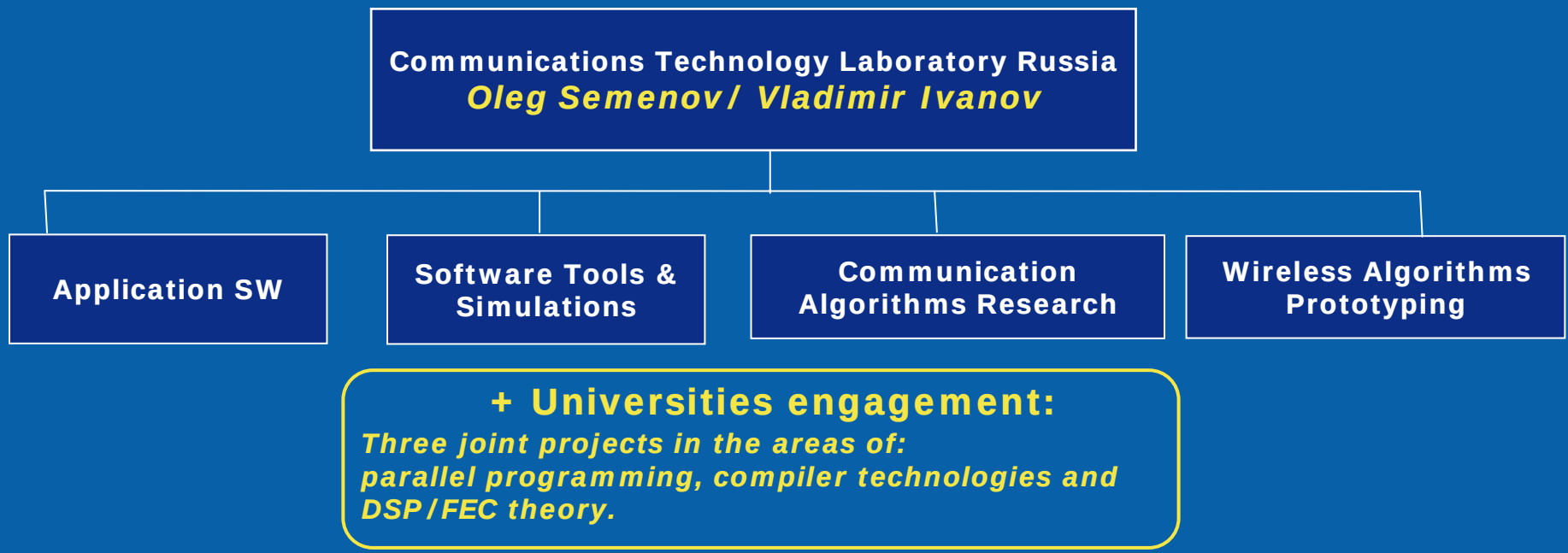
Communication Technology Lab Russia (CTLR)

Established in 2003.
Located in Saint-Petersburg.
Now has 4 teams/29 people on board.



Core Competencies

- S/W Tools & Programming for Heterogeneous SoC
- Coding Theory & DSP Algorithms
- HW/RTL/FPGA Prototyping

CTLR Main Current Projects in 2007 and beyond:

- Wireless Research (new Coding and DSP methods for OGA standards, interference cancellation)
- Flexible PHY and MAC for multi-radio (architecture, HW design , SW tools, SW application, simulations)
- Video over wireless (new compression algorithms adapted to wireless channel)

CLTR Past Project Highlights

- UWB/Wireless USB research and development (WUSB Product Developer's Kit in Commercial Use By USB Implementer's Forum
- 10Gb research (Standardized FEC codes in IEEE 802.3an & 802.3ap)
- 802.11n Opnet simulation (Used to Compare and Validate Intel & 3rd Party Technical Proposals to IEEE 802.11n)

Standards & Regulatory Influence

- IEEE 802.11n (all simulations for TGN Sync group)
- IEEE 802.16x (LDPC codes application support)
- IEEE 802.3an (LDPC coding – Nov. 2003)
- IEEE 802.3ap (new coding scheme – Sept. 2005)
- Wireless USB (early prototyping affected specs)
- ITU-T/CEPT (UWB regulatory issues,7 paper submitted)
- WiMedia (Video over wireless)
- IEEE P1900 (multi radio coexistence)

About 50 patents for Intel since 2004