The Ershov Informatics Conference (the PSI Conference Series, the 8th edition) is the premier international forum in Russia for research and its applications in computer, software and information sciences. The conference brings together academic and industrial researchers, developers and users to present and discuss the most recent innovations, trends, experiences and concerns in the conference area.

The Ershov Informatics Conference is dedicated to the 80th anniversary of a pioneer in theoretical and system programming research, academician Andrei Petrovich Ershov (1931–1988) and to the 100th anniversary of one of the founders of cybernetics, a member of the Soviet Academy of Sciences Alexei Andreevich Lyapunov (1911–1973).

Organizers
- A.P. Ershov Institute of Informatics Systems, Siberian Branch of RAS
- Novosibirsk State University

Conference Chair
Alexander Marchuk
A.P. Ershov Institute of Informatics Systems & Novosibirsk State University, Novosibirsk, Russia

Steering Committee
Honorary Member
Tony Hoare
Microsoft Research, Cambridge, UK

Members
Dines Bjørner
Technical University of Denmark, Lingby, Denmark
Manfred Broy
Institut für Informatik, Technische Universität München, Germany
Victor Ivannikov
Institute for System Programming RAS, Moscow, Russia
Bertrand Meyer
ETH, Zürich, Switzerland, and Eiffel Software, Goleta, USA
Leonid Libkin
University of Edinburgh, UK

Programme Committee Chairs
Edmund Clarke
Carnegie Mellon University, Pittsburgh, USA
Irina Virbitskaitė
A.P. Ershov Institute of Informatics Systems & Novosibirsk State University, Novosibirsk, Russia
Andrei Voronkov
The University of Manchester, UK

Conference Secretary
Natalia Cheremnykh
A.P. Ershov Institute of Informatics Systems
6, Acad. Lavrentiev av.
630090 Novosibirsk, Russia
tel.: +7 383 3307352
fax: +7 383 3323494
e-mail: psi2011@iis.nsk.su; cher@iis.nsk.su;

Conference Topics

Foundations of Program and System Development and Analysis
- specification, validation, and verification techniques,
- program analysis, transformation and synthesis,
- semantics, logic and formal models of programs,
- partial evaluation, mixed computation, abstract interpretation, compiler construction,
- theorem proving and model checking,
- concurrency theory,
- modeling and analysis of real-time and hybrid systems,
- computer models and algorithms for bioinformatics.

Programming Methodology and Software Engineering
- object-oriented, aspect-oriented, component-based and generic programming,
- programming by contract,
- program and system construction for parallel and distributed computing,
- constraint programming,
- multi-agent technology,
- system re-engineering and reuse,
- integrated programming environments,
- software architectures,
- software development and testing,
- model-driven system/software development,
- agile software development,
- software engineering methods and tools,
- program understanding and visualization.

Information Technologies
- data models,
- database and information systems,
- knowledge-based systems and knowledge engineering,
- bioinformatics engineering,
- ontologies and semantic Web,
- digital libraries, collections and archives, Web publishing,
- peer-to-peer data management.

In addition to papers on topics from the list above, papers both bridging the gap between different directions and promoting mutual understanding of researchers are welcome. Papers defining the general prospects in computer, software and information sciences are also encouraged.
Invited Speakers

Eike Best, University of Oldenburg, Germany
Peter Buneman, The University of Edinburgh, UK
Rupak Majumdar, Max Planck Institute for Software Systems, Kaiserslautern, Germany
Ugo Montanari, University of Pisa, Italy
Joseph Sifakis, Verimag & ArtistDesign NoE Schneider-INRIA chair, Giers, France

Programme Committee

Samson Abramsky, Oxford Univ., UK
Frédéric Benhamou, Univ. Nantes, France
Leopoldo Bertossi, Carleton Univ., Canada
Eike Best, Univ. of Oldenburg, Germany
Kim Bruce, Pomona College, California, USA
Mikhail Bulyonkov, IIS, Novosibirsk, Russia
Gabriel Ciobanu, Inst. Comp. Sc. RA, Iași, Romania
Dieter Fensel, STI Innsbruck, Austria
Jean Claude Fernandez, Univ. J. Fourier, Grenoble, France
Jan Friso Groote, Eindhoven Univ. of Techn., The Netherlands
Heinrich Herre, University of Leipzig, Germany
Viktor Kasyanov, IIS, Novosibirsk, Russia
Joost-Pieter Katoen, RWTH Aachen Univ., Germany
Torben Mogensen, Univ. Copenhagen, Denmark
Hanspeter Mössenböck, JK Univ. Linz, Austria
Peter Mosses, Swansea Univ., Wales, UK
Peter Müller, ETH Zürich, Switzerland
Valery Nepomniashchy, IIS, Novosibirsk, Russia
Nikolaj Nikitchenko, Nat. Univ. Kiev, Ukraine
José R. Paramá, Univ. A Coruña, Spain
Francesco Parisi-Presicce, Univ. La Sapienza, Rome, Italy
Wojciech Penczek, Inst. Comp. Sci., Warsaw, Poland
Peter Pepper, Tech. Univ. Berlin, Germany
Alexander Petroenko, ISP RAS, Moscow, Russia
Jaroslav Pokorný, Charles U., Prague, Czech Republic
Wolfgang Reisig, Humboldt Univ., Berlin, Germany
Donald Sannella, University of Edinburgh, UK
Klaus-Dieter Schewe, SW Competence Center Hagenberg, Austria
David Schmidt, Kansas State Univ., Manhattan, USA
Alexander Semenov, IIS, Novosibirsk, Russia
Nikolay Shilov, IIS, Novosibirsk, Russia
Val Tannen, Univ. Pennsylvania, USA
Lothar Thiele, ETH Zurich, Switzerland
Mark Trakhtenbrot, Holon Inst. of Technology, Israel
Alexander L. Wolf, Imperial College, London, UK
Tatyana Yakhno, Izmir Univ., Turkey
Wang Yi, Uppsala Univ., Sweden

Types of Submissions and Instructions

There are three categories of submissions:

- regular papers describing fully developed work and complete results (12 pages / 30 minute talks);
- short papers reporting on interesting work in progress and/or preliminary results (7 pages / 15 minute talks);
- system and experimental papers describing implementation or evaluation of experimental systems and containing a link to a working system (4 pages / 10 minute presentation).

Submissions should:

- contain original contributions that have not been published or submitted to other conferences/journals in parallel with this conference;
- clearly state the problem being addressed, the goal of the work, the results achieved, and the relation to other works;
- be in PS or PDF and formatted according to Springer LNCS Instructions for Authors: http://www.springeronline.com;
- be in English and in a form that can be immediately included in the proceedings without major revision;
- be attached (if necessary) by an appendix that contains proofs etc. However, the paper must be self-contained without the appendix in that reviewers may not read the appendix;
- be sent electronically (as a PostScript or PDF file) through the submissions link to the conference website: http://www.easychair.org/conferences/?conf=psi11 not later than February 28, 2011.

Submitted regular papers that are judged to have limited merit may be accepted as short papers, with up to seven pages in the proceedings. When submitting authors should indicate if they wish to have their submission considered as a short paper in the case it is not accepted as a regular one.

At least one author of each accepted paper must register, attend the conference and present the paper.

Conference Proceedings

Pre-Conference Publications

A preliminary book of tutorial, invited and accepted contributions will be handed out at the conference.

Post-Conference Publications

The final versions of the invited, regular and short papers presented at the conference will be published by Springer-Verlag in the Lecture Notes in Computer Science series after the conference. One can find the proceedings of the previous six conferences in LNCS, Vol. 1181, 1755, 2244, 2890, 4378 and 5947, respectively.

Location

The conference will be held in Akademgorodok which is located in a picturesque place near the Ob lake, 30 km South from Novosibirsk, the largest city of Siberia. Silence, beautiful landscape, and pure air are the factors promoting scientific activity and creativity during the conference.

Travelling

You can fly to Novosibirsk via Moscow by Aeroflot, Transaero, UTair or S7. Direct S7 flights will bring you from Frankfurt, Hanover, Seoul or Beijing to Novosibirsk and back. Now you can buy electronic tickets on Aeroflot, S7 and Transaero flights via the websites and pay by VISA and other popular cards. All participants will be met at the Novosibirsk airport and brought to Akademgorodok by a special transport.

Weather

The weather in Novosibirsk at the end of June is normally quite warm and sunny with the temperatures in the range of 25–30°C.

Satellite Workshops

N.B. Three satellite workshops will be held in conjunction with PSI’11:

- Science Intensive Applied Software.
- Educational Informatics,
- Program Understanding.

Important Dates

- February 28, 2011: submission deadline
- April 2, 2011: notification of acceptance
- June 27 – July 1, 2011: the conference dates
- September 1, 2011: camera ready papers due