#### **CURRICULUM VITAE**

#### V.L. Selivanov

### Personal

Name: Victor SELIVANOV

Birthyear: 1952

Birthplace: Oktiabrski city, Bashkortostan, Russia

Nationality: Russian

Languages: Russian, English and German

Marital Status: Married since 1984

## Languages

Russian as the native language, English and some German as foreign languages.

### Education

1969.09—1974.06. Student of Kazan State University. Specialty: Mathematical Logic (Diploma with Honor).

1974.09—1977.10. Postgraduate student of Kazan State University (Chair of Theoretical Cybernetics). Specialty: Computability Theory. Advisors Professor M. M. Arslanov and Professor R. G. Bukharayev.

1979.03. Candidate degree (an analog of PhD in the West). Dissertation "On computable numberings" defended at the University of Novosibirsk (thesis advisors Professor M. M. Arslanov and Professor R. G. Bukharayev).

1989.12. Doctor degree (an analog of Habilitation in some of the Western countries). Dissertation "Hierarchical classification of arithmetical sets and index sets" defended at the Institute of Mathematics of Siberian Division of Russian Academy of Sciences, Novosibirsk.

1993.03. Title of professor (chair of Mathematical Logic and Informatics), a Russian analog of full professor in the West.

# **Employment**

1978.01—1980.06. Assistant professor at Ullianovsk Polytechnic Institute, chair of Higher Mathematics.

1980.09—1982.09. Assistant professor at Kazan Institute of Chemical Technology, chair of Applied Mathematics.

1982.10—1986.09. Senior lecturer at Novosibirsk Pedagogical University, chair

of Algebra.

1986.10—1990.04. Dotsent (an analog of reader in the English system) at Novosibirsk Pedagogical University, chair of Algebra.

1990.05—1991.08. Professor at Novosibirsk Pedagogical University, chair of Algebra.

1991.09—2009.01. Professor and head of chair of Informatics and Discrete Mathematics at Novosibirsk State Pedagogical University.

2009.01—now. Chief Research Fellow at A. P. Ershov Institute of Informatics Systems of Siberian Division of Russian Academy of Sciences, Laboratory of Theoretical Programming.

### Other positions

1990—1993. Senior research fellow at the S. L. Sobolev Institute of Mathematics of Siberian Division of Russian Academy of Sciences, department of Mathematical Logic (half time).

1998—2009.12. Senior research fellow at the A. P. Ershov Institute of Informatics Systems of Siberian Division of Russian Academy of Sciences, Laboratory of Theoretical Programming (half time).

2010.01—now. Professor and head of chair of Informatics and Discrete Mathematics at Novosibirsk State Pedagogical University (half time).

2005.02—now. Professor of Novosibirsk State University (chair of Discrete Mathematics and Informatics, part time).

1993.04—1994.12. Visiting researcher at Mathematical Institute of the University of Heidelberg, Germany (as a Fellow of the Alexander von Humboldt Foundation), chair of Mathematical Logic.

1999 (February—April). Visiting researcher at Computer Science Department of the Technical University of Aachen, Germany (as a Fellow of the Alexander von Humboldt Foundation), chair of Theoretical Informatics.

2001 (January—March). Visiting researcher at Institute of Informatics of the University of Würzburg, Germany (supported by the German Research Foundation DFG), chair of Theoretical Informatics.

2001 (November—December). Visiting researcher at Department of Mathematics of the University of Siegen, Germany (supported by the German Academic Exchange Service DAAD), chair of Theoretical Informatics.

2002 (May—October). Visiting professor at Department of Mathematics of the University of Siegen, Germany, chair of Theoretical Informatics.

2003 (November). Visiting researcher at Institute of Informatics of the University of Würzburg, Germany (supported by the Alexander von Humboldt

Foundation), chair of Theoretical Informatics.

2003 (December)—2004(January). Visiting researcher at Universities of Darmstadt and Siegen, Germany (supported by the German Research Foundation DFG).

2004 (August—September). Visiting researcher at University of Darmstadt, Germany (supported by the German Research Foundation DFG).

2004 (December). Visiting researcher at the Institute of Informatics of the University of Würzburg, Germany (supported by the Alexander von Humboldt Foundation), chair of Theoretical Informatics.

2005 (May—June). Visiting professor at LIAFA, University of Paris-7, France.

2005 (November). Visiting researcher at Department of Mathematics of the University of Siegen, Germany, chair of Theoretical Informatics.

2006 (January). Visiting researcher at Department of Mathematics of the University of Siegen, Germany, chair of Theoretical Informatics.

2006 (June—December) and 2007 (April—October). Mercator visiting professor at the Institute of Informatics of the University of Würzburg, Germany (supported by the German Research Foundation DFG), chair of Theoretical Informatics.

October 2013. Visiting research Fellow at R Kurt Gödel research center.

#### Grants and Fellowships

Alexander von Humboldt Fellowship 1993—1994.

German Research Foundation Fellowship 2001.

Russian Foundation for Basic Research Grant 1996—1998 "Fine hierarchies in logic and computer science" (Team leader).

Russian Ministry of Education Grant 1998—2000 "Logic and regular languages" (Team leader).

Russian Foundation for Basic Research Grant 2000—2002 "Logical methods in automata theory" (Team leader).

Joint RFBR—INTAS Grant 1999—2001 "Computability and models" (Team member).

Joint DFG—RFBR Grant 2001—2003 "Domain-like structures for semantics and computation models" (Team member).

DAAD Grant 2005—2007 "Computability and complexity in analysis and topology".

Mercator visiting professorship supported by the German Research Foundation DFG (2006–2007).

Joint DFG—RFBR Grant 2006—2008 "Computations over non-discrete structures: models, semantics and complexity" (Team member).

Russian Foundation for Basic Research Grant 2007—2009 "Logical methods in automata theory and computability theory with constraints" (Team leader).

Joint DFG—RFBR Grant 2009—2011 "Formal Methods in Design and Analysis of Distributed and Real Time Systems" (Team member).

European Union Project 2012—2016 "Computable Analysis" (Russian team leader).

Russian Foundation for Basic Research Grant 2013—2015 "Algebraic and logical methods in the theory of computations on discrete and continuous structures" (Team leader).

Joint FWF (Austrian Förderung der wissenschaftlichen Forschung)-RFBR Grant 2013—2015 "Computability and Definability" (Team member).

## Teaching Experience

37 years of experience in teaching mathematics and informatics on undergraduate, graduate and postgradute levels. Lectures, seminars and special courses at the Institutions mentioned above, as well as at the Universities of Novosibirsk and Siegen, in Mathematical Analysis, Analytic Geometry, Probability and Statistics, Numeric Methods, Informatics, Discrete Mathematics, Programming, Algebra and Number Theory, Mathematical Logic, Computability Theory, Automata Theory, Formal Languages, Dynamic Systems and Fractals, Internet—Technologies in Education.

Advisor for 10 PhD thesises and many Master thesises.

Author of textbooks and didactic materials of different kind in Algebra, Logic, Informatics and Didactics of Informatics (published by the institutions where I was employed).

## Awards

Honorary title "Merited worker of the high school", an award of the Russian Government, 1999.

Honorary title "Merited worker of science and technology of Russian Federation", an award of the Ministry of Science and Education of Russian Federation, 2012.

# Conferences (organization)

Program Committee member of the International Workshop "Domains-8" (Novosibirsk, Russia, 2007).

Program Committee member of the International Conference "Computer Science Russia" (Ekaterinburg 2007, Moscow 2008, Novosibirsk 2009).

Program Committee member of the International Conference "Computability and complexity in analysis" (Lubliana 2009, Cambridge 2012).

Program Committee member of the International Conference "Continuity, Computability, Constructivity: From Logic to Algorithms" (Trier, Germany, 2012), (Gregynog, UK, 2013), and (Kochel, Germany, 2015).

An organizer of Dagstuhl seminars "Topological and game-theoretic aspects of infinite computations" in 2008, "Advances and applications of automata on words and trees" in 2010, "Computing with infinite data: topological and logical foundations" in 2011, "Duality in computer science" in 2013 and 2015, "Well quasiorders in computer science" in 2016.

## Conferences (paticipation)

Participant of many National and International conferences in mathematical logic, applied logic and computer science, including:

National Russian conference in Mathematical Logic (Moscow, Russia, 1986, invited talk),

National Russian conference in Mathematical Logic (Leningrad, Russia, 1988, invited talk),

International Symposium for Foundations of Computation Theory (Kazan, Russia, 1987),

International Congress for Logic, Methodology and Philosophy of Science (Moscow, Russia, 1987),

International Congress for Logic, Methodology and Philosophy of Science (Uppsala, Sweden, 1991),

Joint Meeting of the American Mathematical Society and of the Deutsche Mathematische Vereinigung (Heidelberg, Germany, 1993),

International Workshop on Computability Theory (Oberwolfach, Germany, 1996).

International Symposium for Theoretical Aspects of Computer Science (Caen, France, 1994, Dresden, Germany, 2001, Berlin, Germany, 2003, Bordeaux, France 2008).

International Workshop on Computability and Models (Novosibirsk, Russia, 2001, invited talk).

International Workshop on Computability and Complexity in Analysis (Dagstuhl, Germany, 2001, Lutherstadt-Wittenberg, Germany, 2004, Hagen, Germany 2008).

International Workshop on Computability and Models (Novosibirsk, Russia, 2001, invited talk).

International Workshop Domains-7 (Darmstadt, Germany, 2004).

International Conference on Infinite Games (Bonn, Germany, 2004).

International Conference "Computability in Europe" (Swansea, Great Britain 2006, , Siena, Italy 2007, Heidelberg, Germany 2009, Ponta Delgada, Portugal 2010, Sofia, Bulgaria 2011).

International Conference "Developments in Language Theory" (Turku, Finland 2007, Stuttgart, Germany 2009, Milan, Italy 2011).

International Conference "Descriptive set theory in Paris" (Paris, France, 2011).

Maltsev meeting (Novosibirsk, Russia, 2012, invited talk).

International Congress "Issac" (Krakow, Poland, 2013).

Sy Friedman-60 conference (Vienna, Austria, 2013), invited talk.

Workshop "Wadge theory and automata" (Turin, Italy, 2015, invited talk).

Jahrestagung der Deutsche Mathematiker Vereinigung (Hamburg, Germany, 2015, invited talk at minisymposium on well quasiorders).

SSLPS annual meeting "The Wadge hierarchy and computer science" (Lousanne, Switzerland, 2015, invited talk).

Int. programme "Sets and computations" (National University of Singapore, 2015, invited talk).

# Invited Lectures

Several lectures were given by me by invitation of some universities including:

The University of Moscow (Department of Mathematical Logic),

The University of Heidelberg, Germany (Department of Mathematics),

The University of Karlsruhe, Germany (Department of Computer Science),

The University of Würzburg, Germany (Department of Computer Science),

The University of Hagen, Germany (Department of Computer Science),

Technical University of Aachen, Germany (Department of Computer Science),

The University of Kiel, Germany (Department of Computer Science),

The University of Halle, Germany (Department of Computer Science),

The University of Stuttgart, Germany (Department of Computer Science),

The University of Tübingen, Germany (Department of Computer Science),

The University of Siegen, Germany (Department of Mathematics and Department of Computer Science),

Technical University of Darmstadt, Germany (Chair of Logic in Computer Science),

The University of Duisburg, Germany (Department of Computer Science),

The Military University of Munich, Germany (Department of Computer Science),

The University of Leeds, Great Britain (Department of Mathematics),

The University of Manchester, Great Britain (Department of Computer Science),

The University of Leicester, Great Britain (Department of Computer Science),

The University of Siena, Italy (Department of Mathematics and Computer Science),

The University of Amsterdam, Netherlands (Department of Mathematics and Computer Science),

The University of Marne-la-Valle, France (Department of Computer Science),

The University of Athens, Greece (Department of Philosophy),

The University of Freiburg, Germany (Department of Mathematical Logic).

The University of Vinna, Austria (Kurt Gódel Research Center).

The University of Swansea, United Kingdom (Department of Computer Science).

The University of Cambridge, United Kingdom (Department of Computer Science).

### Other Activity

Member of the Russian Academy of Informatization of Education and of the American Mathematical Society

Referee of some mathematical journals including:

Theoretical Computer Science,

Journal of Automata, Languages and Combinatorics,

Archive for Mathematical Logic,

RAIRO Theoretical Informatics and Applications,

International Journal for Foundations of Computer Science,

Annals of Pure and Applied Logic,

Russian Academy of Sciences Izvestia,

Algebra and Logic,

Siberian Mathematical Journal,

Proceedings of High Schools (Mathematics).

At different time I was a reviewer of  $Mathematical\ Reviews$ , a member of the  $Association\ for\ Symbolic\ Logic$  and of the  $European\ Association\ for\ Theoretical\ Computer\ Science.$ 

## **Editorial Board**

- 1. System Informatics (Novosibirsk).
- 2. Bulletin of the Novosibirsk Computing Center.

V.L. Selivanov

Novosibirsk, Russia October 2015