

# ACADEMIC CURRICULUM VITAE

## SECTION A: GENERAL INFORMATION

- **Name:** Sergei S. Ospichev.
- **Positions:**
  - Researcher, Sobolev Institute of Mathematics, Novosibirsk, Russia.
  - Assistant Professor, Mathematics Department, Novosibirsk State University.
  - Deputy Director, Mathematical Center in Akademgorodok, Novosibirsk.
- **E-mail:** ospichev@gmail.com

## EDUCATIONAL QUALIFICATIONS:

- 2010-2013: Ph.D. in Mathematics,  
Thesis: *Algebraic and Structure properties of Rogers semilattices in Ershov hierarchy*,  
advisor: prof. S.S. Goncharov
- 2005-2010: BA and MA, Mathematics Department, Novosibirsk State University, Russia
- 2003-2005: Mathematics Department, Kemerovo State University, Russia.

## APPOINTMENTS

- 2009-present: Sobolev Institute of mathematics, Novosibirsk, Russia, Researcher (from 2014), Junior Research Fellow (from 2013), Research Assistant (from 2009).
- 2009-present: Novosibirsk State University, Mathematics Department, Sub-department of Discrete Mathematics and Informatics, Assistant Professor (from 2022), Lecturer (from 2016), Assistant (from 2011), Tutor (from 2009).
- 2019-present: Mathematical Center in Akademgorodok, Researcher (from 2019), Deputy Director (from 2021).
- 2016, 2018, 2019: Visiting Researcher, Nazarbaev University, Astana, Kazakhstan.
- 2011 (July-August): Visiting Researcher, Siena University, Italy.
- 2011 (February): Visiting Researcher, Al-Farabi Kazakh National University, Almaty, Kazakhstan.

## SECTION B: RESEARCH

### Primary research areas:

- a)generalized computability (Goncharov-Sorbi approach)
- c)computable numberings
- d)computable functionals
- e)m-reducibility and m-degrees
- f)foundations of semantic programming
- g)complexity of formulas

### Conferences:

- 2009-2021: Logic Colloquium, European Summer Meeting of the ASL, contributed talks.
- 2009-2011,2013-2021: Malcev Meeting, Novosibirsk, Russia, contributed talks.
- 2021: Conference of International World-Class Mathematical Centers, Sochi, Russia, section plenary talk.
- 2020: Workshop "Reverse mathematics, numberings, and equivalence relations", online, plenary talk.
- 2012: Malcev Meeting, Novosibirsk, Russia, plenary talk.
- 2010,2011, 2019: Computability in Europe, contributed talks.
- 2011,2021: Lobachevsky Meeting, Kazan, Russia, contributed talks.

### Work in Progress:

- Project: *Computable numberings of partial computable functionals of finite types*.
- Project: *Generalized computable numberings*. Collaborators: N. Bazhenov (Sobolev Institute of Mathematics), B. Kamurzaev (Al-Farabi Kazakh National University), M. Mustafa (Nazarbayev University), M. Yamaleev (Kazan Federal University).
- Project: *Complexity of formulas in semantic programming*. Collaborators: S. Goncharov(Sobolev Institute of Mathematics), D. Ponomaryov(A.P. Ershov Institute of Informatics Systems), D. Sviridenko(Sobolev Institute of Mathematics)

### Selected refereed papers:

1. N. Bazhenov, M. Mustafa, S. Ospichev, L. San Mauro, Approximating Approximate Reasoning: Fuzzy Sets and the Ershov Hierarchy, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 2021, 13039 LNCS, pp. 113.
2. S. Goncharov, S. Ospichev, S. D. Ponomaryov, D. Sviridenko, The expressiveness of looping terms in the semantic programming, Siberian Electronic Mathematical Reports, 2020, Vol. 17, pp. 380-394.

3. S. Ospichev, Friedberg numberings of families of partial computable functionals, Siberian Electronic Mathematical Reports, 2019, Vol. 16, pp. 331-339.
4. N. Bazhenov, M. Mustafa, S. Ospichev, Bounded Reducibility for Computable Numberings, LNCS, 2019, Vol. 11558, pp. 96-107.
5. S. Ospichev, Computable Families of Sets in the Ershov Hierarchy Without Principal Numberings, Journal of Mathematical Sciences, 2016, Vol. 215, Issue 4, pp. 529-536
6. S. Ospichev, Friedberg Numberings in the Ershov hierarchy, Algebra and Logic, 2015, v. 54, Issue 4, pp. 283-285
7. S. Ospichev, Infinite family of  $\Sigma_a^{-1}$ -sets with a unique computable numbering, Journal of Mathematical Sciences, 2013, Vol. 188, Issue 4, pp. 449-451.
8. S. Ospichev, Computable family of  $\Sigma_a^{-1}$ -sets without Friedberg numberings. In *6th Conference on Computability in Europe, CiE 2010*, 6th Conference on Computability in Europe, CiE 2010, Ponta Delgada, Azores, 2010, pp. 311-315.

**Books:**

1. Yu.D. Korolkov, S.S. Ospichev, Algorithmic properties of computable numberings, Irkutsk State University, in Russian.

## SECTION D: TEACHING

I have taught the following courses at The Novosibirsk State University:

<i>Year</i>	<i>Title</i>
2020-22	Mathematical Logic(lectures)
2013-22	Mathematical Logic(seminars)
2019-22	Project management(seminars)
2009-20	Algorithms Theory(seminars)
2014	Mathematical Logic(lectures)
2014	Linear Algebra and Analytical Geometry(lectures)

**Administrative work at the Novosibirsk State University:**

From 2014 – academic secretary of Sub-Department of Discrete Mathematics and Informatics. This is administration duty that involves managing teaching activities of about 30 employees and students of this sub-department.

## SECTION E: SERVICE

- Member of Malcev meeting organizing committees (2009–2019).
- Member of "Equivalences, Numberings, Reducibilities" workshop organizing committee (2020).
- Refereeing for the following journals: Algebra and Logic, Siberian Journal of Mathematics, Annals of Pure and Applied Logic, Mathematical Logic Quarterly, Mathematical Reviews