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EMPLOYMENT

Higher School of Economics, Russia, Moscow 2020–currently
Faculty of Humanities, School of Philosophy. Associate Professor. Course “Philosophy” (bachelors).

Saint Petersburg state University, Russia 2016–currently
Institute of Philosophy, Department of Philosophy of Science and Technology. Senior Lecturer.
Courses “Philosophy of Science” and “Philosophical Problems of Physics” (bachelors, PhD students).

EDUCATION

Saint Petersburg state University, Russia 2009–2013
Candidate of Science in Philosophy (Ph.D.). Post-graduate Program. Department of Philosophy of Science and Technology. Theme: “Philosophical and Methodological Problems of the Principle of Least Action.” Dissertation Advisor: Professor Igor Dmitriev.

Dzerzhinsky Higher Naval Engineering School, Saint-Petersburg, Russia 1982–1987
Specialist, Engineer-shipbuilder, the Search and Rescue Service. Deep-diving expert.

RESEARCH PROJECT AND GRANTS

“**Philosophical Questions of Quantum Mechanics**”, workshop and website. Designed and managing.
Saint-Petersburg State University 2015–currently
Saint-Petersburg State University of Information Technologies, Mechanics and Optics 2014

“**Revolutionary transformations in science as a factor of innovation processes**” (2018-2020).
Grant of the RFBR (RGNF). Project No. 18-011-00920.

5th Tuebingen Summer School in the History and Philosophy of Science. Probability and Quantum Mechanics. Tuebingen, Germany, August 1st–5th, 2016. A grant for travel.

Paper Development Workshop in Analytical Philosophy and Theology. The Ratio Project of the John Templeton Foundation, the University of St. Thomas (Minnesota, USA). Moscow, July 1st–5th, 2014. A grant for travel and taking part in the workshop.

CURRENT RESEARCH INTERESTS

- modal approaches to quantum physics, quantum experiments, quantum information;
- metaphysics of time in physics;
- metaphysics of the principle of least action, Feynman path integral, causality, laws of nature;
- metaphysics of Leibniz, modal metaphysics, essentialism.

PUBLICATIONS

in English:

Terekhovich V. The Metaphysics of the Principle of Least Action. *Studies in History and Philosophy of Modern Physics*. 2018. 62, 189-201.

Terekhovich V. *Possible worlds and substances striving to existence*. Issues on the (Im)Possible IV. *Organon F*. 2016. 4(23), 561-563.

Terekhovich V. Modal Approaches in Metaphysics and Quantum Mechanics. 2015. <http://philsci-archive.pitt.edu/11319/>. In Russian: *Metaphysics*. 2015. 1(15), 129–152.

- Terekhov V. Probabilistic and Geometric Languages in the Context of the Principle of Least Action. 2012. *arXiv:1210.1176v2*. In Russian: *Philosophy of Science, Novosibirsk*. 2013. 1, 80-92.
- Terekhov V. Possible worlds and substances. 2017. <http://philpapers.org/rec/TERPWA>. In Russian: *Vox Philosophical journal*. 22.

in Russian:

BOOK: Terekhov V. *Formula of Meaning. The Investigation of Opinions about Meaning of Human Existence*. 2012. St. Petersburg: Aletheia, 224 p.

PAPERS:

- Terekhov V. Two times in the physical theories: Metric time and Development time. In "*Time in the modern picture of the world*". Institute of Philosophy RAS. Moscow. (in press).
- Terekhov V. Three approaches to the problem of quantum reality and the second quantum revolution. *Epistemology & Philosophy of Science*. 2019. 56(1), 169-184.
- Terekhov V. Reality of the wave function and manipulative argument. *Metaphysics*. 2019. 1(31), 155-164.
- Terekhov V. Revolutionary transformations in quantum physics and innovations in quantum technologies. *Manuscript*. 2018. 11, 119-125.
- Terekhov V. The metaphysical postulates of modern physics, which should be abandoned. *Metaphysics*. 2018. 27(1), 78-84.
- Terekhov V. The existence of quantum objects. Experimental verification of metaphysical presuppositions. *Metaphysics*. 2017. 23(1), 104-112.
- Antipenko L.G., Belyakov A.V., Vladimirov Yu.S., Godarev-Lozovsky M.G., Kopeikin K.V., Lipkin A.I., Nikulov A.V., Panov A.D., Sergievskaya G.N., Sevalnikov A.Yu., Spaskov A.N., Terekhov V.E. The problem of realism in modern quantum mechanics. Discussion materials. *Philosophy of science and technology*. 2016. 21(2), 34-64.
- Terekhov V. Modal Approaches in Metaphysics and Quantum Mechanics. *Metaphysics*. 2015. 15(1), 129-152.
- Terekhov V. *Ontological Foundations of the Variational Principles and the Path Integral Method*. In Mathematics and Reality. Moscow Studies in the Philosophy of Mathematics. Moscow: University Press. 2014.
- Terekhov V. Philosophical and Scientific Problems of the Principle of Least Action. *Historical, Philosophical, Political and Law Sciences, Culturology and Study of Art. Issues of Theory and Practice*. 2013. 1(1), 179-183.
- Terekhov V. Generalization of Extremal Principles of Physics. *Almanac of Modern Science and Education*. 2012. 11, 184-192.
- Terekhov V. Efficient and Final Causes in the Principle of Least Action. *Vestnik of Pushkin Leningrad State University*. 2012. 2(3), 49-59.
- Terekhov V. The Interference of Possibilities or How Path Integrals Explain the Probabilistic Causality. *Philosophy of Science, Novosibirsk*. 2012. 52(2), 108-120.
- Terekhov V. *The Unification of Probabilistic and Geometric Languages in Description of Nature (the Principle of Least Action, Path Integrals, and Transition from Possible to Actual Being)*. Ontological Studies-I. International Conference "Ontological studies in modern Russia", 18-20 November 2010, St. Petersburg, 2011. Russia, 123-132.
- Terekhov V. Multidimensionality of Space as a New Paradigm of Science. Superstring theory. *Proceedings of RFO (Russian Philosophical Society)*. 2008. 15, 319-327.
- Terekhov V. What is Ontology, What is It for, and How does It Differ from Metaphysics? Generalized System of Ontology and Metaphysics. *Proceedings of Russian Philosophical Society*. 2008. 15, 5-56.

CONFERENCE ABSTRACTS and PRESENTATIONS

- "Is it true that philosophy is too important for physics to be left to the philosophers?"* The Third Russian Conference on the Foundations of Fundamental Physics and Mathematics. PFUR. November 29, 2019. Moscow.
- "Does physics need a philosophy?"* All-Russian Youth Scientific Forum "Open Science 2019". November 15, 2019. Institute of Nuclear Physics, Gatchina.
- "Does the reality of the wave function follow from the possibility of its manipulation?"* International congress on logic, methodology and philosophy of science and technology (CLMPST), August 5–10, 2019. Prague, Czech Republic.
- "Does the possibility of manipulating the wave function speak of its reality?"* The Second Russian Conference on the Foundations of Fundamental Physics. PFUR. November 30, 2018. Moscow.
- "Did time disappear in physics? The arguments for and against the block universe"*. The first international congress ROIFN "History and philosophy of science in an era of change." September 14-16, 2018. Moscow.
- "The fragile block universe. Relativistic and relational time"*. Conference "Time in the modern picture of the world." Institute of Philosophy RAS. December 6, 2018. Moscow.
- "Philosophical problems in quantum experiments"*. The philosophy of science and technology in Russia: the challenges of information technology. Vologda: Vologda State University, 2017.
- "Metaphysical postulates of modern physics, which should be abandoned"*. The First Russian Conference on the Foundations of Fundamental Physics. PFUR. November 10, 2017. Moscow.
- "The Modal Interpretation of the Principle of Least Action and Feynman Path Integrals"*. 5th Tuebingen Summer School in the History and Philosophy of Science "Probability and Quantum Mechanics" (in English). August 1 - 5, 2016. Tuebingen, Germany.
- "Possible worlds and substances striving to existence"*. International conference "MODAL METAPHYSICS: Issues on the (Im)Possible IV." (in English). 30-31 August, 2016. Institute of Philosophy, Slovak Academy of Sciences, Bratislava, Slovakia.
- "Three ways to relate consciousness and quantum mechanics"*. IEEE International Symposium on Video and Audio Signal Processing in the Context of Neurotechnologies. Roundtable "Quantum neurobiology: myth or reality." St. Petersburg, July 1, 2016.
- "Existence of quantum objects. Experimental verification of metaphysical presuppositions"*. Conference "Quantum mechanics and philosophical discourse". April 14-15, 2016. Institute of Philosophy of the Russian Academy of Sciences, Moscow.
- "Optical-mechanical analogy in physics and the philosophy of Leibniz"*. 3rd International Historical-Scientific Optical Symposium "History of Optics and the Nature of Light". October 28-30, 2015. St. Petersburg.
- "Explanatory Potential of Mathematics in Quantum Physics"*. International Conference "New mathematical methods in today's physics: logical, epistemological and computational aspects", Institute of Philosophy, RAS, September 21-23, 2015. Moscow (in English).
- "The Modal Approaches in Metaphysics and Quantum Mechanics"*. Conference "Ontology of quantum mechanics", Institute of Philosophy RAS. October 14-15, 2014. Moscow.
- "Path Integrals as a Way to Explain the Universality of Mathematics"*. Abstracts Third All-Russian scientific conference "Philosophy of Mathematics: actual problems". September 27-28, 2013. Moscow, pp. 99-103.
- "Review of the Variational Principles in Different Fields of Physics"*. Materials reports International Conference on Mechanics and Ballistics "VIII Okunev's Readings", June 25-28, 2013. St. Petersburg, pp. 280-282.
- "Meaning of Life Formulae, which Hinder Human Development"*. International Conference "The meaning of life: the acquisition and loss", St. Petersburg State University, November 17-19, 2011. St. Petersburg. Paradigm: Philosophical and cultural studies anthology. 2012. 18(19), pp. 58-64.

"The Meaning of Life from the Point of View of Ontology". Materials of XI-XV symposia "Psychological problems of meaning in life and acme". *Proceedings of the Samara Scientific Center, RAN*. 2010. 12(5), Appendix, 74-79.

"What Should Be Practical Philosophy?". Working Papers conference "What philosophy of science do we need?" St. Petersburg State University. June 8-9, 2007. St. Petersburg.

REFEREE:

Synthese

Epistemology & Philosophy of Science

ADDITIONAL EMPLOYMENT

JSC Poligrafoformlenie-Flexo, Printing and Converting Factory

2007-currently

Information System Consultant, part-time

REFERENCES

Grib Andrey, Professor; Department of Theoretical Physics and Astronomy, Herzen State Pedagogical University of Russia; E-mail: andrei_grib@mail.ru

Hans Halvorson, Professor, Department of Philosophy, Princeton University, Princeton, NJ 08544; E-mail: hhalvors@princeton.edu

Andrew Sevalnicov, Professor; Leading Researcher Fellow, Institute of Philosophy RAS, Moscow; 14, Volchonka str., Moscow; E-mail: sevalnicov@rambler.ru