

# Ilya V. Schurov

## Publication list

### Papers

[1] I. V. Schurov. [\*Ducks On The Torus: Existence and Uniqueness\*](#). Journal of Dynamical and Control Systems, **16**:2 (2010), 267—300. Preprint: [arXiv:0910.1888v1 \(math.DS\)](https://arxiv.org/abs/0910.1888v1)

[2] Шуров И.В. [\*Уточные циклы в типичных быстро-медленных системах на торе.\*](#), Труды ММО **71** (2010), 200-234

Translation: I. V. Shchurov. [\*Canard cycles in generic fast-slow systems on the torus.\*](#) Transactions of the Moscow Mathematical Society, **2010**, 175-207.

[3] П. И. Каледа, И. В. Щуров. [\*Цикличность элементарных полициклов с фиксированным числом особых точек в типичных k-параметрических семействах.\*](#) Алгебра и анализ. **22**:4 (2010), 57—75)

Translation: P. I. Kaleda; I. V. Shchurov. [\*Cyclicity of elementary polycycles with fixed number of singular points in generic k-parameter families.\*](#) St. Petersburg Math. J. **22** (2011), 557-571.

[4] I. V. Schurov. *Duck farming on the two-torus: multiple canard cycles in generic slow-fast systems*, Discrete and Continuous Dynamical Systems, **Supplement 2011**, 1289–1298 [arXiv:1008.0133 \(Math.DS\)](https://arxiv.org/abs/1008.0133).

[5] A. A. Glutsyuk, V. A. Kleptsyn, D. A. Filimonov, I. V. Schurov. *On quantization of crossconnections in the equation modelling Josephson effect*. In the final study of preparation.

[6] O. L. Romaskevich, I. V. Schurov, V. A. Kleptsyn. *Slow-fast systems and Josephson effect*. To appear in "Nanostructures. Mathematical physics and modelling".

### Conference talks

- Petrovskii Conference: Differential Equations and Related Topics, Moscow State University, 2007. Abstract: *Ducks on the torus existence and uniqueness*.
- Summer school "Dynamical Systems" under supervision of Yu. S. Ilyashenko, Slovakia, 2009. *Slow-fast systems on the two-torus*.
- [\*Topology, Geometry, and Dynamics\*](#): Rokhlin Memorial, January 11-16, 2010. Saint Petersburg, Russia. *Canard cycles in generic slow-fast systems on the two-torus*
- [\*The 8th AIMS Conference on Dynamical Systems, Differential Equations and Applications\*](#), Dresden University of Technology, Dresden, Germany, May 25—28, 2010. *Canard cycles in generic slow-fast systems on the two-torus*.
- [\*Equadiff 2011\*](#), August 1-5, 2011, Loughborough University, Loughborough, UK. *Polynomial growth of cyclicity for elementary polycycles and Hilbert-Arnold problem*.
- [\*International Workshop on Hysteresis and Slow-Fast Systems\*](#), Wittenberg, Germany, December 12-14, 2011. *Canard cycles in generic slow-fast systems on the two-torus*.
- [\*Summer school "Dynamical Systems"\*](#) under supervision of Yu. S. Ilyashenko, Dubna, 2012. *Slow-fast systems and Josephson effect*.

- O. L. Romaskevich, I. V. Schurov, V. A. Kleptsyn. *Slow-fast systems and Josephson effect.* Школа-семинар «Взаимодействие математики и физики: новые перспективы». МИЭМ НИУ ВШЭ и МИРАН, 2012.

## Other

- [Modern Illustrated Encyclopedia: Mathematics, Informatics](#). (Рус.: Современная Иллюстрированная Энциклопедия: Математика, Информатика. Росмэн, 2007. [ISBN 978-5-353-02884-0](#).) Author of several articles on calculus, differential equations and discrete math.
- [Wikipedia, the free encyclopedia](#). Author of several articles on math and other topics (in Russian)