ALEXEY ISKAKOV

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Employment History:

V.A.Trapeznikov Institute of Control Sciences (Moscow)
Senior Researcher, Lab. of Multiconnected Control Systems 2011 – now

Imperial College London (UK)
Invited Researcher, Dept. of Physics 2007 – 2008

University of California, Los Angeles (UCLA)
Assistant Researcher, Dept. of Physics and Astronomy 2006 – 2008
Postdoctoral Fellow, Dept. of Physics and Astronomy 2004 – 2006
Supervisor: Professor Steven C. Cowley

Geophysical Institute in Paris (IPGP, France)
Postdoctoral Fellow, Laboratory of Geomagnetism 2002 – 2004
Supervisor: Dr. Emmanuel Dormy

Institute for Mathematical Modeling RAS (Moscow)
Researcher, Dept. of Numerical Methods in Fluid Mechanics 2000 – 2002
Supervisor: Professor V.F.Tishkin

Education:

Institute for Mathematical Modeling RAS (Moscow) 1996 - 1999
Ph.D. in Physics and Math, Specialty: Mathematical simulation, numerical methods and program complexes.

Moscow Institute of Physics and Technology (MIPT) 1990 - 1996
Faculty of Management and Applied Mathematics
M.S. in Applied Physics and Math,
Qualification: engineer mathematician

Other Positions:

2012, 2014 – visit-researcher at Université Catholique de Louvain, Center for Operations Research and Econometrics (UCL, CORE, Louvain-la-Neuve, Belguim)
2010 – visit-researcher at Oxford University, R.Peierls Centre for Theoretical Phys. (Oxford, UK)
2008, 2007, 2005 – visit-researcher at Imperial College London, Dept.of Phys. (IC, London, UK)
2007, 2005 – professeur invités at Université Paris Diderot – Paris VII (Paris, France)
2007 – invited researcher at Wolfgang Pauli Institute (WPI, Austria, Vienna)
1999 - 2001 – engineer at Czech Technical University in Prague (Czech Republic, Prague)

Experience and Accomplishments:

- 24 papers in journals Q1/Q2 SJR (incl., *Int. J. Robust Nonlin., Phys. Rev. Lett., J. Comput. Phys., Control Eng. Practice, Games Econ. Behavior*)
- In Web of Science: 39 papers, > 500 citations, h-index = 11
  http://www.researcherid.com/rid/T-9199-2017
- In Google Scholar: > 900 citations, h-index = 15
  http://scholar.google.com/citations?user=Zu5udjEAAAAJ&hl=en&oi=ao
- >85 papers and preprints, including 35 conference proceedings papers
- >20 grants/fellowships
- Review experience: *Automatica, Int. J. Robust Nonlin., IET Control Theory Appl., etc.*
  https://publons.com/author/1216834/a-b-iskakov#profile

Papers indexed in Q1/Q2 SJR (Web of Science):

1. Yadykin I.B., Iskakov A.B., **A Comparison of Sub-Gramian Analysis with Eigenvalue Analysis for Stability Estimation of Large Dynamical Systems,**
   Automation and Remote Control **79**(10), 1767-1779 (2018)

   (Q2 SJR 2017; IF JCR 2017 = 0.562)
   https://link.springer.com/article/10.1134/S000511791810003X

2. Iskakov M., Iskakov A., d'Aspremont C.,
   Games for cautious players: The Equilibrium in Secure Strategies,
   Games and Economic Behavior **110**, 58-70 (2018)

   (Q1 SJR 2017; IF JCR 2017 = 0.878)
   https://www.sciencedirect.com/science/article/pii/S0899825618300423

3. Iskakov A.B., **Integral Solution of Linear Multi-Term Matrix Equation and Its Spectral Decompositions,**
   Doklady Mathematics **97**(2), 193-196 (2018)

   (Q2 SJR 2017; IF JCR 2017 = 0.534)
   https://link.springer.com/article/10.1134/S1064562418020187

4. Iskakov A.B., Iskakov M.B., **Chain Equilibriua in Secure Strategies,**
   Automation and Remote Control **78**(6), 1159-1172 (2017)

   (Q2 SJR 2017; IF JCR 2017 = 0.562)
   https://link.springer.com/article/10.1134/S0005117917060169

5. Yadykin I.B., Iskakov A.B., **Spectral Decompositions for the Solutions of Sylvester, Lyapunov, and Krein Equations,**
   Doklady Mathematics **95**(1), 103-107 (2017)

   (Q2 SJR 2016; IF JCR 2017 = 0.534)
   https://link.springer.com/article/10.1134/S1064562417010173

6. Yadykin I.B., Kataev D.E., Iskakov A.B., Shipilov V.K., **Characterization of power systems near their stability boundary using the sub-Gramian method,**
   Control Engineering Practice **53**, 173-183 (2016)

   (Q1 SJR 2016; IF JCR 2017 = 2.616)
   http://www.sciencedirect.com/science/article/pii/S0967066115300253

7. Iskakov A.B., Iskakov M.B.,
   Equilibriua in Secure Strategies in the Bertrand-Edgeworth Duopoly,
   Automation and Remote Control **77**(12), 2239-2248 (2016)

   (Q2 SJR 2016; IF JCR 2017 = 0.562)
   https://link.springer.com/article/10.1134/S0005117916120122

8. Iskakov M.B., Iskakov A.B., **Equilibrium Contained by Counter-Threats and Complex Equilibrium in Secure Strategies,**
   Automation and Remote Control **77**(3), 495-509 (2016)

   (Q2 SJR 2016; IF JCR 2017 = 0.562)
   http://link.springer.com/article/10.1134/S0005117916030115

9. Yadykin I.B., Iskakov A.B., **Energy Approach to Stability Analysis of the Linear Stationary Dynamic Systems,**
   Automation and Remote Control **77**(12), 2132-2149 (2016)

   (Q2 SJR 2016; IF JCR 2017 = 0.562)

https://link.springer.com/article/10.1134/S0005117916120043

10. Yadykin I.B., Iskakov A.B., Akhmetzyanov A.V.,
Stability analysis of large-scale dynamical systems by sub-Gramian approach,
Int. J. Robust Nonlin. Control **24** (8-9), 1361-1379 (2014)

    (Q1 SJR 2014; IF JCR 2017 = 3.856)
    http://onlinelibrary.wiley.com/doi/10.1002/rnc.3116/abstract

11. Iskakov M., Iskakov A., **Solution of the Hotelling's game in secure strategies,**
Econ. Lett. **117** (1), 115-118 (2012)

    (Q1 SJR 2012; IF JCR 2017 = 0.581)
    http://www.sciencedirect.com/science/article/pii/S0165176512002388

12. Gissinger G., Iskakov A., Fauve S., Dormy E., **Effect of magnetic boundary conditions on the dynamo threshold of von Kármán swirling flows,**
Europhys. Lett. **82**, 29001 (2008)

    (Q1 SJR 2008; IF JCR 2017 = 1.834)
    http://iopscience.iop.org/article/10.1209/0295-5075/82/29001

13. Yousef T.A., Heinemann T., Schekochihin A.A., Kleeorin N.,
Rogachevskii I., Iskakov A.B., Cowley S.C., and McWilliams J.C.,
Generation of magnetic field by combined action of turbulence and shear,
Phys. Rev. Lett. **100**, 184501 (2008)

    (Q1 SJR 2008; IF JCR 2017 = 8.839)
    https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.100.184501

14. Iskakov A.B., Schekochihin A.A., Cowley S.C., McWilliams J.C., Proctor M.R.E.,
Numerical demonstration of fluctuation dynamo at low magnetic Prandtl numbers,
Phys. Rev. Lett. **98**, 208501 (2007)

    (Q1 SJR 2007; IF JCR 2017 = 8.839)
    https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.98.208501

15. Schekochihin A.A., Iskakov A.B., Cowley S.C.,
McWilliams J.C., Proctor M.R.E., Yousef T.A.,
Fluctuation dynamo and turbulent induction at low magnetic Prandtl numbers,
New J. Phys. **9**, 300 (2007) [invited article for the *Focus Issue on Magnetohydrodynamics and the Dynamo Problem*]

    (Q1 SJR 2007; IF JCR 2017 = 3.579)
    http://iopscience.iop.org/article/10.1088/1367-2630/9/8/300/meta

16. Iskakov A. and Dormy E.,
On magnetic boundary conditions for non-spectral dynamo simulations,
Geophys. Astro. Fluid **99** (6), 481-492 (2005)

    (Q2 SJR 2005; IF JCR 2017 = 1.417)
    http://www.tandfonline.com/doi/abs/10.1080/03091920500337145

17. Iskakov A.B., Descombes S., Dormy E.,
An integro-differential formulation for magnetic induction in bounded domains: Boundary Element - Finite Volume method,
J. Comput. Phys. **197** (2), 540-554 (2004)

    (Q1 SJR 2004; IF JCR 2017 = 2.864)
    http://www.sciencedirect.com/science/article/pii/S002199910300651X?via%3Dihub

18. Lebo I.G., Demchenko N.N., Iskakov A.B., Limpouch J., Rozanov V.B., and Tishkin V.F., **Simulation of high-intensity laser-plasma interactions by use of the 2D Lagrangian code "ATLANT-HE"**, *Laser Part. Beams* **22**, 267-273 (2004)

(Q2 SJR 2004; IF JCR 2017 = 1.272)
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19. Limpouch J., Iskakov A.B., Masek K., Rohlena K., Lebo I.G., and Tishkin V.F., **Transverse structures in corona of non-uniformly irradiated solid targets,** *Laser Part. Beams* **20**, part 1, 93-100 (2002)

(Q2 SJR 2002; IF JCR 2017 = 1.272)
https://doi.org/10.1017/S0263034602201135

20. Andreev A.A., Limpouch J., Iskakov A.B., Nakano H., **Enhancement of x-ray line emission from plasmas produced by short high-intensity laser double pulses**, *Phys. Rev. E* **65** (2), 026403 (2002)

(Q1 SJR 2002; IF JCR 2017 = 2.284)
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21. Iskakov A.B., Lebo I.G., Rozanov V.B., Tishkin V.F., **On the neutron yield in two-beams scheme of laser heating and compression of spherical shell targets with a low density coating,** *J. Russ. Laser Res.,* **22** (1), 82-89 (2001)

(Q2 SJR 2001; IF JCR 2016 = 0.553)
https://link.springer.com/article/10.1023%2FA%3A1009555729261

22. Iskakov A.B., Lebo I.G., and Tishkin V.F., **2D Numerical Simulation of the Interaction of High-Power Laser Pulses with Plane Targets Using the "ATLANT-C" Lagrangian Code**, *J. Russ. Laser Res.,* **21** (3), 247-263 (2000)

(Q2 SJR 2001; IF JCR 2016 = 0.553)
https://link.springer.com/article/10.1007%2FBF02508951

23. Iskakov A.B., Tishkin V.F., Lebo I.G., Limpouch J., Masek K., and Rohlena K., **Two-dimensional model of thermal smoothing of laser imprint in a double-pulse plasma,** *Phys. Rev. E,* **61** (1), 842-847 (2000)

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24. Lebo I.G., Iskakov A.B., Limpouch J., Mashek K., Rohlena K., and Tishkin V.F., **2D Modeling of thermal smoothing of laser imprint in a double-pulse plasma,** *Laser Part. Beams,* **17** (4), 759-793 (1999)

(Q2 SJR 1999; IF JCR 2017 = 1.272)
https://www.cambridge.org/core/journals/laser-and-particle-beams/article/2d-modeling-of-thermal-smoothing-of-laser-imprint-in-a-doublepulse-plasma/B6F68F32DF444BEC26C9112174CB8F98