

ANTON SAVOSTIANOV

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Research interests

Evolutionary Partial Differential Equations; Infinite-Dimensional Dynamical Systems; Attractors.

Employment

Jan 2017 – Current Assistant Professor, Durham University, UK.
Oct 2015 – Oct 2016 Postdoctoral Researcher, University of Cergy-Pontoise, France.

Education

Jan 2012 – Sep 2015 Ph.D. The University of Surrey, UK.
Thesis: Strichartz estimates and smooth attractors of dissipative hyperbolic equations.
Supervisor: Prof. Sergey Zelik.
Sep 2010 – Jul 2011 MSc (Cum Laude) V. N. Karazin Kharkiv National University, Ukraine.
Supervisor: Prof. Igor Chueshov.
Sep 2006 – Jul 2010 BSc (Cum Laude) V. N. Karazin Kharkiv National University, Ukraine.
Supervisor: Prof. Igor Chueshov.

Scholarships and Awards

Jul 2014 Vice-Chancellor's Award 2014 Finalist, University of Surrey, UK.
Jul 2014 First Place Student Paper Competition Award of AIMS, Madrid, Spain.
2012 – 2015 University Research Scholarship from The University of Surrey, UK.
2012 – 2015 Overseas Research Scholarship from The University of Surrey, UK.
2011 Scholarship of N. I. Akhiezer Fund, Kharkiv, Ukraine.

Grants

2018 London Mathematical Society Grant (Scheme 2), Ref. 21707.

Talks

Oct 2018 Cardiff Analysis Seminar, Cardiff University, UK.
Sep 2018 Dynamics of Dissipative PDEs Workshop, University of Surrey, UK.
Jul 2018 IFIP TC7 Conference on System Modelling and Optimization, University of Duisburg-Essen, Germany.
Jun 2018 Workshop "Recent advances in homogenisation theory", Durham University, UK.
Feb 2018 Conference "Infinite-dimensional Analysis and Control Theory" dedicated to the centenary of S. V. Fomin, Lomonosov Moscow State University, Russia.
Jul 2017 Conference "Dynamics, Bifurcations and Strange Attractors", Workshop IDDSA2, Lobachevsky State University of Nizhny Novgorod, Russia.
May 2017 Applied Mathematics Seminar, Durham University, UK.
Mar 2017 The 5th Bremen Winter School and Symposium "Dynamical systems and fluids", University of Bremen, Germany.
May 2016 Séminaire d'Analyse, Laboratoire de Mathématiques et Modélisation d'Évry, France.
May 2016 Séminaire EDP et Applications, Université de Poitiers, France.
Jul 2015 Conference-School "Infinite-dimensional dynamics, dissipative systems, and attractors", Lobachevsky State University of Nizhny Novgorod, Russia.

- Jun 2015 Workshop: Longtime Behaviour of Nonlinear Waves, University of Bielefeld, Germany.
 Jul 2014 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Madrid, Spain.
 Mar 2014 University of Surrey Analysis Seminar, The University of Surrey, UK.
 Aug 2013 Equadiff 13, Charles University of Prague, Czech Republic.
 Dec 2010 International Young Scientists' Conference
 "70 years of KNU's mechanics and mathematics faculty",
 Taras Shevchenko National University of Kyiv, Ukraine.

Teaching

- Oct 2018 — Dec 2018 the course "Partial Differential Equations";
 tutorials in Linear Algebra, Numerical Analysis;
 Computer Practical Classes in Numerical Analysis (Python based);
 Durham University, UK.
 Oct 2017 — Dec 2017 Delivered the course "Continuum Mechanics";
 Conducted tutorials in Linear Algebra;
 Durham University, UK.
 Jan 2017 — Mar 2017 Delivered the course "Numerical Methods in PDEs";
 Conducted tutorials in Linear Algebra;
 Durham University, UK.
 Jan 2012 — May 2014 Marking of assignments in Linear Algebra, Calculus,
 Linear PDEs, Complex Analysis;
 Consultations in Linear Algebra, Function Spaces, Operator Theory;
 University of Surrey, UK.
 Sep 2010 — Dec 2010 Consultations on Numerical Methods;
 V. N. Karazin Kharkiv National University, Ukraine.
 Sep 2009 Mathematics lessons conduction, home task marking;
 Kharkiv Lyceum of Physics and Mathematics no. 27, Ukraine.

Projects Supervision

- 2018 Functional Analysis and PDEs (Masters Projects), Durham University:
 Tianrui Bayles-Rea (admitted to a PhD Program at the University of Oxford);
 James Bower (admitted to a PhD Program at the University of Bath);
 Jeniffer Williamson (above average grade).

Publications

- [9] A. Savostianov and S. Zelik, "Smooth uniform attractors for measure-driven quintic damped wave equation with periodic boundary conditions", 2018. arXiv:1810.03149. Submitted.
 [8] S. Cooper and A. Savostianov, "Homogenisation with error estimates of attractors for damped semi-linear anisotropic wave equations," 2018. arXiv:1804.09947. Submitted.
 [7] A. Savostianov, "Infinite energy solutions for critical wave equation with fractional damping in unbounded domains," *Nonlinear Analysis: Theory, Methods & Applications*, vol. 136, pp. 136–167, 2016. original, arXiv:1511.04952.
 [6] A. Savostianov and S. Zelik, "Finite Dimensionality of the attractor for the hyperbolic Cahn-Hilliard-Oono equation in \mathbf{R}^3 ," vol. 39, no. 5, pp. 1254–1267, 2016. original, arXiv:1502.02156.
 [5] A. Savostianov and S. Zelik, "Global well-posedness and attractors for the hyperbolic Cahn-Hilliard-Oono equation in the whole space," *Mathematical Models and Methods in Applied Sciences*, vol. 26, no. 7, pp. 1357–1384, 2016. original, arXiv:1407.5890.
 [4] V. Kalantarov, A. Savostianov and S. Zelik, "Attractors for damped quintic wave equations in bounded domains," *Ann. Henri Poincaré*, vol. 17, no. 9, pp. 2555 - 2584, 2016. original, arXiv:1309.6272.
 [3] A. Savostianov, "Strichartz estimates and smooth attractors for a sub-quintic wave equation with fractional damping in bounded domains," *Advances in Differential Equations*, vol. 20, no. 5–6, pp. 495–530, 2015. original, arXiv:1403.7476.

- [2] A. Savostianov and S. Zelik, "Recent progress in attractors for quintic wave equations," *Mathematica Bohemica*, vol. 139, no. 4, pp. 657–665, 2014. original, arXiv:1311.3290.
- [1] A. Savostianov and S. Zelik, "Smooth attractors for the quintic wave equations with fractional damping," *Asymptotic Analysis*, vol. 87, no. 3–4, pp. 191–221, 2014. original, arXiv:1306.2294.