

CONTACT INFORMATION

Department of Mathematics	TEL: +44-1792-606291
College of Science	FAX: +44-1792-295843
Swansea University	E-MAIL: d.l.finkelshtein@swansea.ac.uk
Bay Campus, Swansea	WEB: www.swansea.ac.uk/staff/science/math/d.l.finkelshtein
SA1 8EN, Wales, UK	

RESEARCH INTERESTS

Mathematical theory of complex systems and their applications to bio- and life sciences; infinite-dimensional and stochastic analysis; probability theory and point processes; scaling limits and related meso- and macroscopic evolutions; non-local nonlinear equations; front propagation and travelling waves

EXPERIENCE

- Department of Mathematics, Swansea University, UK

<i>Associate Professor</i>	3/2020 – Present
<i>Senior Lecturer</i>	3/2017 – 2/2020
<i>Lecturer</i>	9/2013 – 2/2017
- Department of Mathematics, Bielefeld University, Germany

<i>Scientific Fellow</i>	3/2013 – 8/2013
--------------------------	-----------------
- Institute of Mathematics, Kyiv, Ukraine

<i>Senior Research Fellow</i> , Department of Fractal Analysis	9/2009 – 4/2017
<i>Research Fellow</i> , Department of Fractal Analysis	1/2008 – 8/2009
<i>Junior Research Fellow</i> , Department of Mathematical Physics	12/2003 – 12/2007
- Dragomanov National Pedagogical University, Kyiv, Ukraine

<i>Leading Research Fellow</i>	1/2015 – Present
<i>Senior Research Fellow</i>	8/2013 – 12/2014
<i>Associate Professor</i>	9/2008 – 6/2013

DEGREES AND EDUCATION

- DSc (Doctor of Sciences, Habilitation) 6/2014
Host: Institute of Mathematics, Kyiv, Ukraine
- PhD in Mathematics 11/2004
Host: Institute of Mathematics, Kyiv, Ukraine
- MSc in Mathematics, *graduated with distinction* 6/2000
Host: Taras Shevchenko National University of Kyiv, Ukraine
- BSc in Mathematics, *graduated with distinction* 6/1999
Host: Taras Shevchenko National University of Kyiv, Ukraine

RECENT GRANTS

- LMS, Conference Grants, Scheme 1 (£4000) 2018
- LMS, Research in Pairs, Scheme 4 (£500, £1000) 2017, 2018
- IMA, Small Grant Scheme (£600) 2018
- Erasmus+ staff mobility (£1000, £1000) 2017, 2018
- Swansea University Research Funds (£730, £400, £450, £900, £650) 2014–2019
- LMS, Joint Research Groups in the UK (£2000, £1200) 2015–2018
- IRSES (Marie Curie Actions) Project, Grant number PIRSES-GA-2013-612669
Co-Investigator, Ukrainian team leader (€74100) 2014–2017

RECENT CONFERENCES

- *Equadiff 2019*, Leiden, Netherlands, 8–12/7/2019
- *Welsh Maths Colloquium*, Gregynog, Wales, 20–22/5/2019
- **Organiser** of *Probability and NonLocal PDEs Interplay and Cross-Impact*, Swansea, 17–19/9/2018
- *12th AIMS Conference on Dynamical Systems, Differential Equations and Applications*, Taipei, Taiwan, 5–9/7/2018
- *UK–Japan Workshop on Analysis of Nonlinear PDEs*, Swansea, 16–18/5/2018
- *Bielefeld–Edinburgh–Swansea Stochastic Spring*, Bielefeld, Germany, 26–28/3/2018
- *Journées ANR Nonlocal*, Chambéry, France, 21–23/03/2018

SELECTED PAPERS

1. S. Cornell, Y. Suprunenko, D. Finkelshtein, P. Somervuo, and O. Ovaskainen. A unified framework for analysis of individual-based models in ecology and beyond. *Nature Communications* **10**(1) (2019).
2. D. Finkelshtein, Y. Kondratiev, and P. Tkachov. Accelerated front propagation for monostable equations with nonlocal diffusion: multidimensional case. *Journal of Elliptic and Parabolic Equations* **5**(2) (Dec. 2019), 423–471.
3. D. Finkelshtein, Y. Kondratiev, and P. Tkachov. Doubly nonlocal Fisher–KPP equation: Front propagation. *Applicable Analysis* (2019), 1–24.
4. D. Finkelshtein and P. Tkachov. Kesten’s bound for sub-exponential densities on the real line and its multi-dimensional analogues. *Advances in Applied Probability* **50**(2) (2018), 373–395.
5. D. Finkelshtein and P. Tkachov. The hair-trigger effect for a class of nonlocal nonlinear equations. *Nonlinearity* **31**(6) (Apr. 2018), 2442–2479.
6. D. Finkelshtein, Y. Kondratiev, Y. Kozitsky, and O. Kutoviy. The statistical dynamics of a spatial logistic model and the related kinetic equation. *Math. Models Methods Appl. Sci.* **25**(2) (2015), 343–370.
7. D. Finkelshtein, Y. Kondratiev, and O. Kutoviy. Semigroup approach to birth-and-death stochastic dynamics in continuum. *J. Funct. Anal.* **262**(3) (2012), 1274–1308.