

# Curriculum Vitae

Theodore Kolokolnikov

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## Education

- **Ph.D. Mathematics**, University of British Columbia, 2001-2004. Supervisor: Michael Ward.
- **M.Sc. Mathematics**, University of British Columbia, 1997-1999. Supervisor: George Bluman.
- **B.Math, Honours pure math, coop option**, University of Waterloo, 1992-1997.

## Work Experience

- **Professor (2015-present)**, Mathematics, Dalhousie University, Canada
  - Assistant (2006-2011), associate (2011-2015), full (since 2015)
- **Postdoctoral fellowship (2005-2006)**, Chinese University of Hong Kong, Hong Kong
  - Holder of NSERC postdoctoral fellowship award.
  - Supervisor: Juncheng Wei.
- **Postdoctoral fellowship (2004-2005)**, Université Libre de Bruxelles, Belgium
  - Holder of NSERC postdoctoral fellowship award.
  - Supervisor: Thomas Erneux.
- **Research assistant (1996-1997, 1999)**, Maple, Symbolic Computation Group, U.Waterloo
  - Implemented several algorithms for differential equations
- **Programmer analyst (1992-1995)**, Corel (Ottawa), Watcom/Sybase Inc (Waterloo)
  - Part of undergraduate COOP placement.

## Awards and Grants

- Killam Professor of Mathematics and Statistics Award (2018)
- NSERC Accelerator award, 2014-2017, \$40,000 per year.
- NSERC Individual Discovery Grant, since 2006, currently at \$28,000 per year.
- CAIMS/PIMS Early Career Award in Applied Mathematics, 2012.
- Director, AARMS/PIMS Summer school, 2015, \$90,000.
- Co-applicant, PIMS/AARMS Concentrated Research Group in PDE's, approx \$200,000 for 2015-2018.
- Principal investigator: Concentrated research group in dynamical systems grant, 2011-2013, \$12,000 per year (AARMS).
- AARMS pdf supervision grant (co-applicant and recipient: Joep Evers), \$17,500 per year, 2016-2018.
- AARMS pdf supervision grant (co-applicant and recipient: Justin Tzou), \$17,500 per year, 2013-2015.

- Principal applicant, Research tools and instruments Grant, NSERC, \$10,000 for compute cluster, 2012.
- Croucher Foundation Advanced Study Institute grant for visiting professor (principal sponsor: Prof. Juncheng Wei), Spring 2012. Value: \$8000.
- United College Resident Fellowship, 2005 (Chinese University of Hong Kong).
- NSERC postdoctoral fellowship award, 2004-2006. Value: \$40,000 per year.
- NSERC PhD award, 2002-2004. Value: \$19,000 per year.

## Visiting positions

- **Visiting professor (2015-2016)**, UBC (Sabbatical)
- **Visiting professor (Summer 2012, Summer 2013)**, UCLA
  - Mentor, Research Training Program for Undergraduates in Applied Mathematics
  - Research collaboration with Bertozzi Group
- **Visiting professor (February-May, 2012)**, Chinese University of Hong Kong
  - Research collaboration with Prof. Juncheng Wei.
- **Visiting professor (January-June, 2009)**, National Taiwan University
  - Taught a graduate course in applied mathematics.
  - Research collaboration with Prof. C.C. Chen.

## Publications

- Over 70 papers since 2004.
- According to Google Scholar, I have 1500 citations since 2004, including over 1000 since 2012.
- Organized a special issue for Physica D (Oct. 2013) and co-organized an special issue for Chaos (2007).
- Journals include: Proceedings of Royal Society Interface, Proceedings of Royal Society A, Physical Review Letters, Physica D, SIAM Journal of Applied Math, SIAM J. Mathematical Analysis, SIAM Journal of Dynamical System, Phys. Rev. E, M3AS, Journal of Differential Equations, European Journal of applied math and others.
- See <http://www.mathstat.dal.ca/~tkolokol/papers> for the full publication list and to download the papers.

## Student Supervision

- Chunyi Gai, Msc/PhD student, Sept. 2014 - present.
- Leila Mohammadi, Phd, 2017- present.
- Joep Evers, Postdoc, Sept. 2015 - July 2017.
- Justin Tzou, Postdoc, 2013 - 2015. Currently assistant prof at Macquarie University, Australia
- Shuanguan Xie, PhD student, Jan. 2012 - Aug 2017. Currently postdoc at Tohoku University, Japan
- Rebecca McKay, PhD student, 2006-2011. Currently a tenure-track instructor at UNB.
- Hanadi Alzubami, MSc student, 2010-2012. Currently a teacher in Saudi Arabia.
- Ainslie Miller, MSc student, 2007-2009. Current position: GIS specialist at Mercator.

- Yuxin Chen, Undergraduate thesis (2012). Current position: PhD student at Northwestern.
- Daniel Zhirov, Undergraduate thesis (2012). Current position: IBM, Toronto.
- Undergraduate summer students supervision:
  - Aakash Sarkar (2015), MITACS accelerate student
  - Hayley Tompkins (2014)
  - Ghislain d’Entremont (2014)
  - Paul-Christopher Chavy-Waddy (2013 and 2015)
  - Sorathan Chaturapruerk, Jonah Breslau and Daniel Yazdi (UCLA 2012, joint with S. McCalla)
  - Yuxin Chen (2011 and 2012)
  - Sara Rumsey (2010)
  - Adam Alcolado (2009, 2010)
- Mentorship:
  - James von Brecht (PhD 2012, UCLA)
  - Hui Sun (PhD 2012, UCLA)
  - Alan Mackey (PhD, UCLA)

## **Leadership, editorial, and other professional activities**

- Director, Canadian Applied and Industrial Math Society (CAIMS) annual meeting, Halifax, 2017.
- Director, AARMS summer school, 2015.
  - Organized four courses involving seven instructors; managed \$90,000 budget.
- Designed and spearheaded the implementation of Honours applied math stream degree at Dalhousie.
- Activity group leader, Dynamical Systems, CAIMS, 2014-present.
- Committee member for selection of best PhD thesis, Canadian Math Society (2013).
- Principal organizer and guest editor, Physica D special issue on particle models (2013).
- Principal investigator, Concentration Research Group in dynamical systems, Atlantic Association for Research in Mathematical Sciences (AARMS), \$24,000 (2012-2013).
- Principal organizer:
  - BIRS workshop, “Coherent Structures in PDEs and Their Applications”, 2016.
  - AARMS workshop on pattern formation, 2015
  - BIRS workshop, “Emergent behaviour in multi-particle systems with non-local interactions”, 2012.
- Co-editor, AARMS Monograph series.
- Guest editor, Chaos focus issue, *Dissipative localized structures in extended systems*.
- Organizer, Dynamical systems session, CAIMS meeting, 2010.
- Referee: NSERC, NSF, Royal Swedish Academy of Sciences, scientific journals.
- CMS Summer math camps, Dalhousie, 2008 and 2010.