Qiming Wang

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TECHNICAL SKILLS

- Programming: Python, Fortran, Matlab, R, SAS, C/C++, SQL, Maple
- Knowledge: Numeical analysis, Data analysis, Machine Learning, Neural Networks, Differential Equations,Stochastic Calculus

CAREER AND RELATED PROJECTS

Manager at Internal Rating Management in Scotia Bank (2016-present)

- Risk parameter estimates based on Non-Retail portfolios
- Research on probabilistic machine learning in risk-related models

TMX project (2015-2016)

- Data analysis and machine learning on commonality in the Canadian stock market

Computational Fluid Dynamics Research (2006-present)

- Asymptotic-analysis-aided numerical method in multiscale fluid problem
- Boundary integral equation method for electrohydrodynamic and transport problem

Lecturer

- Taught Calculus and Advanced Linear Algebra at UBC (2012-2013)
- Taught Calculus, Numerical Computation and Advanced Mathematical Modeling at York University (2013-2015l)

EDUCATION

- Deep Learning Summer School, Vector Institute, Toronto, ON, Canada
- Ph.D., Applied Mathematics, 2010 New Jersey Institute of Technology, Newark, NJ, USA
- B.S.,Computational Mathematics, 2005, Nanjing University, Nanjing, China

ACADEMIC EXPERIENCE

- **Visitor** City University of Hong Kong, lowloon Tong, HK/Fudan University, Shanghai, China (Summer 2016)
- **NSERC Engage Research Fellow** TMX eXplore Innovation Lab, TMX Group, Toronto, ON (Oct 2015 - Mar 2016)
- **Postdoc Fellow** University of British Columbia (July 2011 - June 2013)

AWARDS

- Research support from MITACS and Fields Institute at York University, 2013- 2016
- Research support from Human Frontier Science Program at UBC, 2011-2013
- National Science Foundation (NSF) research support 2009-2011
- College of Science and Liberal Arts Award: Outstanding Graduate Student, 2009

SELECTED PUBLICATIONS

- Q. Wang, M. Ma and M. Siegel 2018 Deformation and stability of a viscous electrolyte drop in a uniform electric field. Submitted to Phys. Rev. Fluids

- J. K. Wrobel, M. R. Booty, M. Siegel and Q. Wang 2018 Simulation of surfactant mediated tipstreaming in a flow focusing geometry. Submitted to Phys. Rev. Fluids

- Q. Wang and D. T. Papageorgiou 2018 Using electric fields to induce patterning in leaky dielectric fluids in a rod-annular geometry IMA J. Appl. Math Vol 83 (1), 2452.

- Q. Wang 2016 Stability and breakup of liquid threads and layers in a corrugated tube with zero base fow SIAM J. Appl. Math. Vol 76 (2), 500-524.

- H. Lan, Q. Wang, R. Fernandez-Gonzalez and J. J. Feng 2015 A biomechanical model for cell polarization and intercalation during Drosophila Germband Extension Phys. Biology Vol 12, 056011.

- Q. Wang, D. T. Papageorgiou and J-M Vanden-Broeck 2015 Kortweg de-Vries solitons in electrified liquid jet Phys. Rev. E Vol 91 (6), 063012.

- Q. Wang, M. Siegel and M. Booty. 2014 Numerical simulation of drop and bubble dynamics with soluble surfactant Phys. Fluids Vol 26, 052102.

- Q. Wang. 2013 Capillary instability of a viscous liquid thread in a cylindrical tube Phys. Fluids Vol 25, 112104.

- M. R. Booty, D. T. Papageorgiou, M. Siegel and Q. Wang 2013 Long-wave equations and direct numerical simulations for the breakup of a viscous fluid thread surrounded by an immiscible viscous fluid, IMA J. Applied Maths. Vol. 78, 851-867.

- Q. Wang 2012 Breakup of a viscous poorly conducting liquid thread immersed in another viscous fluid. Phys. Fluids Vol 24, 102102.

- Q. Wang, J. J. Feng and L. M. Pismen. 2012 A cell-level biomechanical model of Drosophila dorsal closure. Biophys. J. Vol 103, 2265-2274.

- Q. Wang and D. T. Papageorgiou. 2011 Dynamics of a viscous thread surrounded by another viscous fluid in a cylindrical tube under the action of a radial electric eld: Breakup and touchdown singularities. J. Fluid Mech. Vol.683, p27-56.

- Q. Wang, S. Mahlmann and D. T. Papageorgiou 2009 Dynamics of liquid jets and threads under the action of radial electric fields: microthread formation and touchdown singularities Phys. Fluids Vol 21, 0321