Tristan Goodwill

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Education

Ph.D. in Mathematics **2017 - 2023**
Courant Institute of Mathematical Sciences, New York University

On the solution of elliptic partial differential equations on surfaces: Regularity and numerical approaches

B.Sc. **2013 - 2017**
McMaster University
Honours Integrated Science (Physics) with a minor in Mathematics

Employment History

William H. Kruskal Instructor **August 2023 - Present**
Department of Statistics, University of Chicago *Chicago*

Teaching Assistant **Spring and Fall 2019, Fall 2021, Spring 2022**
Courant Institute of Mathematical Sciences, New York University *New York*
Recitation leader for numerical analysis and honors numerical analysis

Research Assistant **2017**
Department of eletrical and computer engineering, McGill University *Montreal*

Papers

Goodwill, T. and O'Neil, M. A parametrix method for elliptic surface PDEs. In preparation.

Goodwill, T. and O'Neil, M. An interface formulation of the Laplace-Beltrami problem on piecewise smooth surfaces. To appear. Preprint arXiv:2108.08959, 2023.

Li, H., Goodwill, T., Wang, Z. J., and Ristroph, L. Centre of mass location, flight modes, stability and dynamic modelling of gliders. Journal of Fluid Mechanics, 937, 2022.

Morsy-Osman, M., Sowailem, M., El-Fiky, E., Goodwill, T., Hoang, T., Lessard, S., and Plant, D. V. DSP-free coherent-lite transceiver for next generation single wavelength optical intra-datacenter interconnects. Optics Express, 26(7), 2018.

Talks

Integral Methods for Surface PDES August 17, 2023
ICOSAHOM 2023 *Yonsei University*
Integral Methods for Surface PDES April 26, 2023
Applied Mathematics Seminar *Department of Mathematics, Yale University*
Integral Methods for Surface PDES October 28, 2022
Analysis and Applied Math Seminar *Department of Mathematics, University of Toronto*