Wenjun Zhao | Curriculum Vitae

Courant Institute of Mathematical Sciences, 251 Mercer Street - New York, NY 10012

Education

PhD candidate in Atmosphere Ocean Science and Mathematics New York, US Courant Institute of Mathematical Sciences, New York University 2016-now Advisor: Professor Esteban G. Tabak **BS** in Computational Mathematics Hefei. China Special Class for Gifted Youth, University of Science and Technology of China (USTC) 2012-2016 Visiting student at Department of Computer Science, University of Oxford 2015

Research interests

Optimal transport and its applications; theoretical and computational geophysical fluid dynamics.

Research experience

Publication in preparation.....

Conditional Density Estimation through Optimal Transport

New York, US

With Professors Esteban Tabak and Giulio Trigila

Submitted to SIMODS

From conventional barycenter optimal transport problem, we propose a methodology to explain the variability and provide simulated conditional density estimation with applications in forecast of US ground temperature. Presented at student seminar, NYU.

Undergraduate research projects.

| New Algorithms for Optimal Portfolio Deleveraging Problem | Beijing, China |
|--|----------------|
| Undergraduate thesis at Chinese Academy of Sciences | 2016 |
| Advisor: Professor Yuhong Duan | |
| Model Verification for Partially Observable Stochastic Hybrid System | Oxford, UK |
| Summer project at Department of Computer Science, University of Oxford, funded by USTC | 2015 |
| Mentor: Professor Alessandro Abate | |
| Macro Scheduling in Face of Ebola | |
| Meritorious Winner in Mathematical Contest of Modeling | 2015 |

Numerical Methods in Solving the Resistance of Grid Problems

Presented at Department of Physics, USTC and won first prize in school-wide Contest of Electromagnetics 2013

Participation.....

NASA JPL-Caltech Summer School

Pasadena, US

Annual event on satellite observations and climate models

2018

Programming skills

| C, Java, MATLAB, Python, Mathematica, LaTEX, Linux | |
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| Honors | |
| MacCracken Fellowship Courant Institute of Mathematical Sciences, New York University | New York, US 2016-now |
| Teaching | |
| Grader for undergraduate and graduate ODEs/PDEs, New York University | 2017–2018 |
| Teaching assistant for undergraduate multivariable calculus, USTC | 2015 |