Jiajie Chen

Information

Applied and Comput. Math

California Institute of Technology

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Research Interests

Partial differential equations, Probability

Education

Aug 2017 – current: California Institute of Technology, Pasadena, USA
- Ph.D. Candidate, Applied and Comput. Math

Sep 2013 – July 2017: Peking University, Beijing, China
- B. S., Mathematics, July 2017

Publications

- J. Chen and T. Y. Hou. Finite time blowup of 2D Boussinesq and 3D Euler equations with $ C^{1,\alpha} $ velocity and boundary. arXiv preprint arXiv:1910.00173, 2019.
- J. Chen. Singularity Formation and Global Well-Posedness for the Generalized Constantin-Lax-Majda Equation with Dissipation. arXiv preprint arXiv:1908.09385, 2019.
- J. Chen, T. Y. Hou and D. Huang. On the Finite Time Blowup of the De Gregorio Model for the 3D Euler Equation. arXiv preprint arXiv:1905.06387, 2019.
- J. Chen, A. Hou and T. Y. Hou. A pseudo knockoff filter for correlated features . Information and Inference: An IMA Journal, (20xx) 00, 1-29, 2018, doi: 10.1093/imaiai/iay012, published online on 7/17/2018.
- J. Chen, A. Hou, and T. Y. Hou. A prototype knockoff filter for group selection with FDR control. Information and Inference: A Journal of the IMA, 2019.
- J. Chen, P. Zhang and Z. Zhang. *Local minimizer and De Giorgi's type conjecture for the isotropic–nematic interface problem*. Calculus of Variations and Partial Differential Equations, 2018, 57(5): 129.

Awards and Honors

- Innovation Prize, Peking University   2016
- Shing-Tung Yau Math Contest, Bronze Medal in Analysis & Differential Equation   2015
- National Scholarship, Peking University   2014
- Chinese Mathematical Olympiad(CMO), Gold Medal (Rank No.1)   2013

Invited Talks and Conferences

- Analysis and PDE Seminar, University of California, San Diego, Nov 2019
- Analysis and PDE Seminar, Peking University, Beijing, China, Sep 2019
- Workshop on "Towards a 3D Euler singularity", AIM, San Jose, CA, Aug 2019
- Workshop on Fluid turbulence and Singularities of the Euler/ Navier Stokes equations, Harvard University, Mar 2019
- Workshop on Multiscale Problems in Materials Science and Biology: Analysis and Computation, Tsinghua Sanya International Mathematics Forum, Jan 2018