

Curriculum Vitae

Seonghyeon Jeong

Personal Information

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Education

- Michigan State University (09/2016 ~)
Ph.D in Mathematics
Advisor : Jun Kitagawa
- Hong Ik University (03/2011 ~ 08/2016)
B.S in Mathematics Education

Research Interests

My research area are optimal transport and related PDEs. Especially, my researches are about optimal transport problems with general cost functions in dynamic settings, MTW type conditions and regularity theory of Monge-Ampère type equations.

Awards and Fellowships

- Silver prize in University Students Contest of Mathematics (33rd, 34th)
Korea Mathematical Society (KMS)
Korea Institute for Advanced Study (KIAS)
2014 (33rd), 2015 (34th)
- College Scholarship (Undergraduate)
Hong Ik University
2014 (FS), 2015 (SS, FS), 2016 (SS)

- University fellowship (Graduate)
Michigan State University
2017(Summer)

Conference and Seminars attended

- Foundation for Mathematical Challenges
Korea Institute for Advanced Study (KIAS)
- Student PDE Seminar
Michigan State University
- Riviere-Fabes Symposium (2019)
University of Minnesota
- Workshop on Free Boundary Problems
Columbia University in the City of New York
- SIAM PDE Webinar
SIAM (Online)
- MBI Optimal Transport Workshop
Ohio State University Mathematical Biosciences Institute (Online)
- 2020 Fields Medal Symposium
The Fields Institute for Research in Mathematical Sciences

Seminar talks

- Partial Regularity of Solutions of the Monge-Ampère Equations
Student PDE Seminar, MSU, 2018
- Underlying Geometry of Optimal Transport
Student Geometry/Topology Seminar, MSU, 2020
- Strong MTW condition to local Hölder regularity in generated Jacobian equations
MPHA Seminar, TAMU, 2020

Research and Publication

- Local Hölder regularity of solutions to generated Jacobian equations
ArXiv : 2004.12004
Submitted to the journal 'Pure and Applied Analysis', Under review.
- Synthetic MTW conditions and their equivalence under mild regularity assumption on the cost function
ArXiv : 2010.14471