RYOSUKE SHIMIZU

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Education

Ph.D. in Informatics, Kyoto University. (Supervisor: Jun Kigami)	Apr. 2020—Sep. 2022
MInf, Kyoto University. (Supervisor: Jun Kigami)	Apr. 2018—Mar. 2020
B.Sc. , Faculty of Science, Kyoto University.	Apr. 2014—Mar. 2018

Fellowship

JSPS Research Fellow (PD) for Young Scientists, Waseda University	Apr. 2023—Present
JSPS Research Fellow (PD) for Young Scientists*, Kyoto University	Sep. 2022—Mar. 2023
JSPS Research Fellow (DC1) for Young Scientists, Kyoto University	April 2020—Sep. 2022

Publications and Preprints

- Construction of p-energy and associated energy measures on Sierpiński carpets. (submitted)
- Parabolic index of an infinite graph and Ahlfors regular conformal dimension of a self-similar set, in **Analysis** and **Partial Differential Equations on Manifolds, Fractals and Graphs**, edited by Alexander Grigor'yan and Yuhua Sun, Berlin, Boston: De Gruyter, 2021, pp. 201–274.

Selected Talks

- Construction of a canonical p-energy on the Sierpiński carpet for all p > 1, Geometric and Stochastic analysis on metric spaces, Kyoto University, Kyoto, Japan, March 13, 2023.
- *Nonlinear potential theory on the Sierpiński carpet*, Analysis and geometry of fractals and metric spaces: Recent developments and future prospects, Bankoku Shinryokan, Okinawa, Japan, March 9, 2023.
- Construction of a canonical p-energy on the Sierpiński carpet (short talk), Smooth Functions on Rough Spaces and Fractals with Connections to Curvature Functional Inequalities, Banff International Research Station, Banff, Canada, November 24, 2022.
- Construction of a canonical p-energy on the Sierpiński carpet (contributed talk), PIMS-CRM Summer School in Probability 2022, University of British Columbia, Vancouver, Canada, June 9, 2022.
- Construction of a canonical p-energy on the Sierpiński carpet (short talk via Zoom), Analysis on Metric Spaces Workshop 2022, OIST & zoom, Okinawa, Japan, May 27, 2022.
- Construction of a canonical p-energy on the Sierpiński carpet, Quasiworld, UCLA (zoom), October 20, 2021.
- Generalized resistance metrics on graphs, Kobe Workshop on Probabilistic Potential Theory and Related Fields, Kobe, Japan, May 7, 2019.

^{*}The category was changed from (DC1) because I obtained the doctral degree.