Pengkun Huang

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Research interests

I hold a broad interest in everything happening in Algebraic Topology. Right now, I focus on homotopy theory. I also find Algebraic K-theory is very interesting.

Education

2021 – Present **University of Copenhagen** – Copenhagen, Denmark
Msc in mathematics (full scholarship in the second year)
Thesis Supervisor: Dr. Robert Burklund

2020 – 2021 **University of Reading** – Reading , UK
Bsc in mathematics (with Department Achievement Prize and Part 3 Project Prize)
Thesis supervisor: Dr. John Evans *GPA: 93.04/100.*

2017 – 2020 **Nanjing University of Information Science and Technology** – Nanjing, China
Bsc in mathematics (Joint double degree program with University of Reading.)
GPA: 92.54/100.

Projects

2022 **Connective Algebraic K-theory of stable infinity categories**
Master Project

2022 **An Introduction to Topological K-theory towards Hopf Invariant One Problem**
Master Project

2021 **An Introduction to Homology Theory Towards Spectral Sequence**
Bachelor Thesis

2020 **A criterion for transitivity of area preserving partially hyperbolic endomorphism on torus**
Undergraduate Research Project. Available at: https://arxiv.org/abs/2011.14257v1

2019 **On the error estimation and T-stability of the Ishikawa iteration for strongly demicontractive mappings**
Authors: Chao Wang, Xueli Li, Pengkun Huang. Undergraduate research project. Published at: Journal of inequalities and applications, (2019)

Activities

2020 09 – 12 **Frontier Courses for Postgraduates (Guangxi Center for Mathematical Research)**
Contents: Topics in Differential Geometry, An introduction to Representation Theory

2020 08 **Summer school in differential geometry (Peking University)**
Contents: Second order elliptic partial differential equations, Complex Geometry, Riemmanian Geometry

2020 07 **Summer school on Geometry (Sichuan University)**
Contents: Linear Methods in Classical Algebraic Geometry, Low Dimensional Hyperbolic Geometry

2019 09 – 10 **Reading Project on Algebraic Geometry**
Contents: Theories of Variety and Sheaf