

Inyoung Ryu

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INTERESTS

Character Variety, Mapping Class Groups and Teichmüller space, Teichmüller Theory,
Low-dimensional Topology, Geometric Group Theory

EDUCATION

Texas A&M University

Ph.D. in Mathematics

Aug.2021 – Present

Texas, US

Ulsan National Institute of Science and Technology(UNIST)

Bachelor of Science in Mathematical Science

Mar.2017 – Jul.2021

Ulsan, Korea

- Minor in Computer Science and Engineering
- Total GPA of 3.99 / 4.3 (95.9 / 100)

Sabancı University

Erasmus Program

Feb. 2020 – Jun. 2020

Istanbul, Turkey

RESEARCH/STUDY EXPERIENCES

In Progress - Topology on Representation Spaces

Texas A&M University

Nov. 2023 – Current

Texas, US

Reading Course with Prof. Tian Yang

Texas A&M University

Feb. 2022 – Oct. 2023

Texas, US

- Teichmüller Theory and Nielsen-Thurston Classification
- Mapping Class Group and Teichmüller Space, Moduli Space
- Knot Theory. Jones Polynomial and Alexander Polynomial

Reading Course with Prof. Tian Yang

Texas A&M University

Feb. 2022 – May. 2022

Texas, US

- Mapping Class Group and Teichmüller Theory
- Knot Theory. Jones Polynomial and Alexander Polynomial

Reading Course with Prof. Guoliang Yu

Texas A&M University

Feb. 2022 – May. 2022

Texas, US

- Fredholm Operator and Higher index Theory

Reading Course with Prof. Irina Bobkova

Texas A&M University

Sep. 2022 – May. 2023

Texas, US

- Algebraic Topology, Stable Homotopy Theory

Low dimensional Topology Seminar

Texas A&M University

Feb. 2022 – May. 2023

Texas, US

- Smooth 4-Manifolds and Intersection Forms
- Teichmüller theory, Nielson-Thurston Classification

Interdisciplinary Project

UNIST

Sep. 2020 – Feb. 2021

Ulsan, Korea

Undergraduate Research Assistant

UNIST

Jul. 2019 – Aug. 2019

Ulsan, Korea

PARTICIPATED CONFERENCES/WORKSHOPS

Canaryfest - Moving to higher rank: from hyperbolic to Anosov <i>Grand Hotel St. Michele</i>	July. 2024 <i>Cetraro, Italy</i>
AlMaRe Conference <i>Fourier Institute</i>	July. 2024 <i>Grenoble, France</i>
Conference on Quantum Topology and Connections to Mathematical Physics <i>Texas A&M University</i>	May. 2024 <i>Texas, US</i>
GIGEM Conference <i>Texas A&M University</i>	April. 2024 <i>Texas, US</i>
Joint Mathematics Meeting (JMM) <i>Moscone Center</i>	Jan. 2024 <i>California, US</i>
Winter School on Low-dimensional Topology and Related Topics <i>Institute for Basic Science</i>	Dec. 2023 <i>Pohang, Korea</i>
Texas Geometry and Topology Conference. <i>Rice University</i>	Nov. 2023 <i>Texas, US</i>
Conference on Characters and Moduli of Surfaces <i>Kyoto University</i>	Jul. 2023 <i>Kyoto, Japan</i>
Summer School on Scissors Congruence, Algebraic K-Theory, and Trace Methods <i>Indiana University</i>	Jun. 2023 <i>Indiana, US</i>
Workshop in Geometric Topology <i>Colorado College</i>	Jun. 2023 <i>Colorado, US</i>
Graduate Student Topology and Geometry Conference <i>Georgia Institute of Technology</i>	Mar. 2022 <i>Georgia, US</i>
Winter school in singularities and low-dimensional topology <i>Rényi Institute</i>	Jan. 2023 <i>Budapest, Hungary</i>
Graduate Student Topology and Geometry Conference <i>Georgia Institute of Technology</i>	Apr. 2022 <i>Georgia, US</i>
Texas Geometry and Topology Conference <i>The University of Texas at Dallas</i>	Feb.2022 <i>Texas, US</i>
The South Central Topology Conference <i>Texas A&M University</i>	Sep. 2021 <i>Texas, US</i>
Arizona Winter School <i>University of Arizona</i>	Jan.2021-Feb.2021 <i>Arizona, US</i>
International Congress of Mathematicians(ICM)	Aug. 2014 <i>Seoul, Korea</i>

TALKS

Nielsen-Thurston Classification <i>GIGEM Conference, Texas A&M University</i>	Apr. 2024 <i>Texas, US</i>
Mapping Class Group Action on Teichmüller Space <i>Graduate Student Organization Seminar, Texas A&M University</i>	Apr. 2024 <i>Texas, US</i>

TEACHING EXPERIENCES

Houston A&M Mothers' Club Outstanding TA Award <i>Texas A&M University</i>	July. 2024 <i>Texas, US</i>
Teaching Assistant(Engineering Math II) <i>Texas A&M University</i>	Jan. 2023 – May. 2023 <i>Texas, US</i>
Teaching Assistant(Engineering Math I) <i>Texas A&M University</i>	Aug. 2022 – Dec. 2022 <i>Texas, US</i>
Teaching Assistant(Calculus I, Calculus II) <i>Ulsan National Institute of Science and Technology</i>	Mar. 2018 – Dec. 2019 <i>Ulsan, Korea</i>
Calculus I Open Lecture <i>Ulsan National Institute of Science and Technology</i>	June.2018 <i>Ulsan, Korea</i>

LEADERSHIP EXPERIENCES

Treasurer

Aug.2022 - May.2023

Association for Women in Mathematics (Texas A&M, 60 members)

Texas, US

- Women in Math Mentoring Lunch
- AWM peer mentoring program