Inyoung Ryu

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Interests

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

Education

Texas A&M University	Aug.2021 – Present
Ph.D. in Mathematics	*Texas, US*
Ulsan National Institute of Science and Technology(UNIST)	Mar.2017 – Jul.2021
Bachelor of Science in Mathematical Science	*Ulsan, Korea*

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

Sabanci University	Feb. 2020 – Jun. 2020
Erasmus Program	*Istanbul, Turkey*

Research/Study Experiences

Topology on Representation Spaces	Nov. 2023 – Current
Texas A&M University	*Texas, US*

- On the number of connected components of $\mathrm{Hom}(\pi, G)$

Reading Course with Prof. Tian Yang	Feb. 2022 – Oct. 2023
Texas A&M University	*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	Feb. 2022 – May. 2022
Texas A&M University	*Texas, US*

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

Reading Course with Prof. Guoliang Yu	Feb. 2022 – May. 2022
Texas A&M University	*Texas, US*

- Fredholm Operator and Higher index Theory

Reading Course with Prof. Irina Bobkova	Sep. 2022 – May. 2023
Texas A&M University	*Texas, US*

- Algebraic Topology, Stable Homotopy Theory

Low dimensional Topology Seminar	Feb. 2022 – May. 2023
Texas A&M University	*Texas, US*

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

Interdisciplinary Project	Sep. 2020 – Feb. 2021
UNIST	*Ulsan, Korea*
Undergraduate Research Assistant	Jul. 2019 – Aug. 2019
UNIST	*Ulsan, Korea*

Participated Conferences/Workshops/Seminars

Joint Mathematics Meeting (JMM)	Jan. 2024
Moscone Center	*California, US*
Winter School on Low-dimensional Topology and Related Topics	Dec. 2023
Institute for Basic Science	*Pohang, Korea*
Texas Geometry and Topology Conference.	Nov. 2023
Rice University	*Texas, US*
Conference on Characters and Moduli of Surfaces	Jul. 2023
Kyoto University	*Kyoto, Japan*
Summer School on Scissors Congruence, Algebraic K-Theory, and Trace Methods	Jun. 2023
Indiana University	*Indiana, US*
Workshop in Geometric Topology	Jun. 2023
Colorado College	*Colorado, US*
Graduate Student Topology and Geometry Conference	Mar. 2022
Georgia Institute of Technology	*Georgia, US*
Winter school in singularities and low-dimensional topology	Jan. 2023
Rényi Institute	*Budapest, Hungary*
Graduate Student Topology and Geometry Conference	Apr. 2022
Georgia Institute of Technology	*Georgia, US*
Texas Geometry and Topology Conference	Feb.2022
The University of Texas at Dallas	*Texas, US*
The South Central Topology Conference	Sep. 2021
Texas A&M University	*Texas, US*
Arizona Winter School	Jan.2021-Feb.2021
University of Arizona	*Arizona, US*
International Congress of Mathematicians(ICM)	Aug. 2014
	Seoul, Korea

Talks

Mapping Class Group Action on Teichmüller Space	Apr. 2022
Graduate Student Organization Seminar, Texas A&M University	*Texas, US*

Teaching Experiences

Teaching Assistant(Engineering Math II)	Jan. 2023 – May. 2023
Texas A&M University	*Texas, US*
Teaching Assistant(Engineering Math I)	Aug. 2022 – Dec. 2022
Texas A&M University	*Texas, US*
Teaching Assistant(Calculus I, Calculus II)	Mar. 2018 – Dec. 2019
Ulsan National Institute of Science and Technology	*Ulsan, Korea*
Calculus I Open Lecture	6/2/2018
Ulsan National Institute of Science and Technology	*Ulsan, Korea*

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