



สร้างสรรค์ วรรณกุล
Sangsan Warakkagun
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RESEARCH INTERESTS

- Low-dimensional topology; particularly, hyperbolic geometry
- Geometric structures on surfaces

EMPLOYMENT

- | | |
|--|---|
| Department of Mathematics, Khon Kaen University
<i>Lecturer (tenure-track)</i> | Khon Kaen, Thailand
<i>June 2024 - Present</i> |
| Beijing Institute of Mathematical Sciences and Applications (BIMSA)
<i>Postdoc</i> | Beijing, China
<i>March 2022 - May 2024</i> |
| ○ Mentor: Yi Huang, YMSC, Tsinghua University | |

EDUCATION

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| Boston College
<i>Ph.D. in Mathematics</i> | Chestnut Hill, MA, USA
<i>August 2021</i> |
| ○ Thesis advisor: Ian Biringer | |
| Wesleyan University
<i>B.A. in Mathematics (High Honors)</i> | Middletown, CT, USA
<i>May 2015</i> |

RESEARCH WRITINGS

- The Translation Geometry of Pólya's Shires
joint with Rikard Bøgvad, Guillaume Tahar, and Boris Shapiro
preprint at *arXiv:2503.07895*
- The Space of Vectored Hyperbolic Surfaces is Path-Connected
Conform. Geom. Dyn. 28 , 115-130 (2024)
- Connectivity of the space of pointed hyperbolic surfaces
Ph.D. Dissertation

INVITED TALKS

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| ○ Tsinghua University's YMSC Topology Seminar | <i>May 2024</i> |
| ○ Tsinghua University's YMSC Topology Seminar | <i>April 2022</i> |
| ○ Hyperbolic Geometry Seminar, CUNY | <i>February 2021</i> |
| ○ 2021 Nearly Carbon Neutral Geometric Topology Conference | <i>June 2021</i> |

CONTRIBUTED TALKS

- Geometry and Dynamics in Low Dimensions, Hanoi, Vietnam *January 2025*
- The 9th International Congress of Chinese Mathematicians (ICCM2022) *August 2022*
- The 46th Annual New York State Regional Graduate Mathematics Conference *April 2021*
- MSRI PA Seminar *November 2020*
- Combinatorial and Algebraic Aspects of Geometric Structures Conference, Chiang Mai *July 2019*
- GSCAGT 2018, Temple University, Philadelphia, PA, USA *June 2018*

AWARDS/GRANTS

- The American Mathematical Society's CASE Workshop Fellowship *March 2019*
- Boston College's Donald J. White Teaching Award for Teaching Fellows *April 2019*
- Phi Beta Kappa, Wesleyan University, *Fall 2014*
- Wesleyan University's Robertson, Rae Shortt, and Rice prizes for excellence in mathematics
- Wesleyan University's summer undergraduate research grant *Summer 2014*
- The Royal Thai Government Scholarship *2010 - 2021*

OTHER PROFESSIONAL TRAINING

- **Certificate**, Boston College's Inaugural Graduate Leadership Program *Spring 2020*
One of the eleven students selected to participate in a series of workshops aimed to empower leadership potential.
- **Participant**, The AAAS CASE Workshop, Washington DC *March 2019*
One of the two students selected by the AMS to participate in the CASE Workshop, which introduces STEM students to the federal policy-making process.

OUTREACH

- **Math Olympiad Instructor**, Khon Kaen University *Summer 2025*
- **Activity Leader**, *Mathternoon*, MIT Museum *April 2018, April 2019*
- **Tutor**, Wesleyan University's Upward Bound Program *2014-2015*

NON-ACADEMIC WRITINGS

- *A Mathematician's Plea to the Electoral Commission*, iLaw (May 2019)
An article in Thai calling for an accurate apportionment of the seats in the Thai Parliament following Thailand's 2019 general election.
- *Math on the Surface*, Science and Technology Report from Washington (2018).
An expository article in Thai about two-dimensional hyperbolic geometry.

PERSONAL INFORMATION

- Citizenship: Thailand