Sungwoo Nam

CONTACT Information University of Illinois at Urbana-Champaign

Department of Mathematics

1409 W. Green St. Urbana, IL 61801

EDUCATION

University of Illinois Urbana-Champaign

Ph.D., Mathematics, August 2016-present

• Advisor: Sheldon Katz

Yonsei University

B.S. in Mathematics(with Honors), Feb 2015

RESEARCH INTERESTS Enumerative geometry— especially local BPS invariants of reducible surfaces from 5d SCFT, Gromov-Witten invariants of hyperkähler manifolds, Moduli of sheaves on surfaces and threefolds.

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Papers and Preprints (with S. Katz) Local Enumerative Invariants of Some Simple Normal Crossing del Pezzo Surfaces, submitted, arXiv:2209.13031

INVITED TALKS

Gromov-Witten invariants of local reducible surfaces, Algebraic Geometry Seminar, KIAS, Jan 2022

 $\it Curve\ counting\ and\ BPS\ invariants\ of\ local\ surfaces,$ Pusan National University, Apr 2021

SERVICE

Organizer, UIUC Graduate Algebraic Geometry, Spring 2019 - Spring 2020

WORKSHOPS

ATTENDED

Conferences and MSRI Summer Graduate School on Tropical Geometry, 2022

Hausdorff School on Perverse Sheaves and Enumerative Geometry

PCMI 2019 Summer School on QFT and manifold invariants, PCMI, 2019

 $String\ Math\ 2018,$ Tohoku University, 2018

Crossing the Walls in Enumerative Geometry, Snowbird, Utah, 2018

Introductory workshop: Enumerative Geometry Beyond Numbers, MSRI, 2018

Enumerative Geometry, Mirror Symmetry, and Physics, UIUC, 2017

TEACHING EXPERIENCE

- Teaching Assistant, Applied Linear Algebra: Fall, 2019
- Teaching Assistant, Calculus III: Fall 2017, Spring 2018, Fall 2018, Spring 2019, Spring 2020, Fall 2020, Spring 2022, Fall 2022
- Teaching Assistant, Business Calculus: Spring 2021
- Graduate mentor, Illinois Geometry Lab, University of Illinois at Urbana-Champaign, Supervisor: Aron Heleodoro Cyclic Vectors for Certain D-modules

Languages Native : Korean

Proficient : English Intermediate : Japanese Beginner : French

References

Sheldon Katz

University of Illinois at Urbana-Champaign

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James Pascaleff

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Matthew Russell (Teaching)

University of Illinois at Urbana-Champaign

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Michel van Garrel

University of Birmingham

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Christopher Dodd

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