

# Kale Stahl

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## Education

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**Purdue University**, West Lafayette, IN  
PhD in Mathematics

*Expected:* May 2030

**Kansas State University**, Manhattan, KS  
B.S. Mathematics, B.S. General Physics, University Honors Program

May 2024

## Publications

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D.L. Nguyen, **K. Stahl**, and T. Truong. *A new sampling indicator function for stable imaging of periodic scattering media* in Inverse Problems, Volume 39, Number 6, May 9, 2023.

URL: <https://iopscience.iop.org/article/10.1088/1361-6420/acce5f/meta>

## Presentations

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2-28-25 Purdue Graduate Analysis Seminar, "A New Sampling Imaging Functional for Imaging Photonic Crystals" – 45 minute talk

12-02-23 Geometric Measure Theory final presentation, "Sobolev Inequalities" – 60 minute talk

11-18-23 Kansas Honors Connections Conference at Emporia State University, "A New Sampling Imaging Functional for Imaging Photonic Crystals" – 10 minute talk

10-30-23 Physics Undergraduate Colloquium at KSU, "A New Sampling Imaging Functional for Imaging Photonic Crystals" – 15 minute talk

02-25-23 Central States Undergraduate Research Conference, "A New Sampling Imaging Functional for Imaging Photonic Crystals" – 15 minute talk

11-29-22 Office of Undergraduate Research & Creative Inquiry Research Showcase – poster

07-15-22 Summer Undergraduate Michigan Mathematics Research Conference – 30 minute talk

04-08-22 JMM 2022 – virtual poster presentation

## Teaching and Grading

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**Purdue University**, West Lafayette, IN  
Graduate Teaching Assistant

- MA 162: Calculus 3

*Fall 2025*

**Kansas State University**, Manhattan, KS  
Undergraduate Teaching Assistant

- PHYS 325: Modern Physics
- PHYS 213: Engineering Physics 1
- PHYS 101: The Physical World

*Fall 2022, Fall 2023*

*Spring 2022, Spring 2023, Spring 2024*

*Fall 2021*

**Undergraduate Grader**

- MATH 221: Calculus 2
- MATH 220: Calculus 1
- MATH 150: Trigonometry
- MATH 100: College Algebra

*Fall 2020, Spring 2021*

*Fall 2020*

*Fall 2020, Spring 2021*

*Fall 2020, Spring 2021*

## Grants and Fellowships

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NSF Graduate Research Fellowship (NSF GRFP)

*2024*