

# Eric Stachura | Curriculum Vitae

✉ estachur@kennesaw.edu • 🌐 facultyweb.kennesaw.edu/estachur

## Employment

---

**Kennesaw State University**  
Kennesaw, GA

**Assistant Professor**  
August 2018-present

**Haverford College**  
Haverford, PA

**Visiting Assistant Professor**  
July 2016-June 2018

## Education

---

**Temple University**  
*Ph.D. in Mathematics*  
Advisor: Cristian E. Gutiérrez

**Philadelphia, PA**  
July 2016

**University of Illinois**  
*B.S. in Mathematics*  
*Cum Laude and with honors. Minor: Physics.*

**Chicago, IL**  
May 2011

## Funding

---

**KSU Summer Research Fellowship, 2020:** KSU Office of Research, \$10,000

**KSU Seed Grant, 2019-2020:** Mathematical Analysis of Optical Phenomena in Exotic Materials, \$9,128

**American-Scandinavian Foundation Fellowship, 2019-2020:** Mathematical Analysis of Nonlinear Maxwell Equations on rough surfaces, \$5,000

## Awards

---

**MAA Project NExT Fellow:** 2019-2020

**SIMIODE DeMarc Fellow:** July 2019

**SIMIODE MInDE Fellow:** July 2018

**Co-PI for Mellon Trico Faculty Forum Seed Grant "Philadelphia Theoretical Chemistry Club":** 2017-2018

## Select Publications

---

1. **E. Stachura.** *Acoustic Wave propagation in Anisotropic Media with applications to Piezoelectric materials.* To appear in *Applicable Analysis*.
2. Á. Bényi, J. M. Martell, K. Moen, **E. Stachura**, and R. Torres. *Boundedness results for commutators with BMO functions via weighted estimates: a comprehensive approach.* *Mathematische Annalen*, 376 (1), 61–102, 2020.

3. **E. Stachura**. Boundary Value problems for the Bi-anisotropic Maxwell system in Lipschitz Domains, in *URSI International Symposium on Electromagnetic Theory (EMTS)*, 2019, 4 pp., doi: 10.23919/URSI-EMTS.2019.8931473.
4. C. E. Gutiérrez, L. Pallucchini, and **E. Stachura**. *General Refraction Problems with Phase Discontinuity on non flat Metasurfaces*. *Journal of the Optical Society of America A*, Vol. 34(7): 1160-1172, 2017.
5. **E. Stachura**. *Existence of weak solutions to Refraction Problems in Negative Refractive Index Materials*. *Nonlinear Analysis*, Vol. 157, 76-103, 2017.
6. **E. Stachura**. *The Time Dependent Maxwell System with Measurable Coefficients in Lipschitz Domains*. *Journal of Mathematical Analysis and Applications*, Vol. 452 (2), 941-956, 2017.
7. **E. Stachura**. *On Generalized Solutions to Some Problems in Electromagnetism and Geometric Optics*. Ph.D thesis, 2016.
8. I. Mitrea, K. Ott, and **E. Stachura**. *Spectral Properties of the Reflection Operator in Two Dimensions*. *Contemporary Mathematics*, Vol. 581, pp. 199-215, 2012.

## Recent Teaching

---

**Ordinary Differential Equations (Math 2306)**: Fall 2019, Spring 2020.

**Ordinary Differential Equations (Math 2306), Intro to Calculus of Variations (Math 4490)**:  
Fall 2020

## Recent Students Supervised

---

**Jessie Chen (2020-)**: Kennesaw State University, "Variational problems for the 2D Maxwell system"

**Nick Hancock (2019-)**: Kennesaw State University, "Bound states and other properties of a new class of screened Coulomb potentials"

## Recent Talks

---

**University of Utah Applied Math Seminar**

**Salt Lake City, UT**

2 March 2020

**University of West Georgia Applied Math Seminar**

**Carrollton, GA**

6 November 2019

**Winthrop University Colloquium**

**Rock Hill, SC**

3 April 2019