

## Ergodic Theory group and recent research activities

### Current PhD Student



**Jacob Folks**

### Recent PhD Students

- Aidan Young: PhD Thesis: “Temporo – Spatial Differentiation” (225 pages) – Spring 2023.
  - (I. Assani, A. Young) Spatial Temporal Differentiations- Acta Math. Hungar. 168, 301–344 (2022)
  - (I. Assani, A. Young) Non -autonomous spatial temporal differentiation theorems for group endomorphisms – Real Analysis Exchange 47, 2, 2022.
- Jacob Folks (current PhD student)

## **Current Master student**



**Aubrey Leary**

## **Master students**

- Geneva Hall – Spring 2021 – Arnold Cat map
- Ariel Glassberg - Summer 2023 – Return Times and the maximal operator
- Current – Aubrey Leary – expected defense – November 2023

## **Undergraduate research (mentoring- advising)**



**Ethan Ebbighausen**

- Cooper Faile – Density of Collatz trajectories- arXiv:2010.07294 ; 2020- Brauer Prize 2020

- Hunter Davis -, "Elements of the Mathematic", Two interesting examples at the intersection of math. May 2021. Honors.
- Scott Hallyburton - Honor Thesis: "Norm and Pointwise Properties of the Brunel Operator" Highest honors – Brauer Prize May 2022
- Cooper Schoone – Honor Thesis: - Properties of Brunel's operator- Highest Honors-May 2022
  - New Estimates on the bounds of Brunel's operator (I. Assani, R. S. Hallyburton, S. McMahon, S. Schmidt, C. Schoone) Coll. Math.,169,(1), 117-139, 2022.
- Anand Hande – Honor thesis – Syracuse Maps as non -singular Power Bounded transformations and their inverse maps – Highest Honors – Brauer Prize.
  - Syracuse Maps as Non-singular Power-Bounded Transformations and Their Inverse Maps arXiv:2208.11801 (I. Assani, E. Ebbighausen, A. Hande) (submitted to Coll. Math.)
- Current student: Ethan Ebbighausen

### Pictures of recent undergraduate students



**Faile Cooper**



**Davis Hunter**



**Scott Hallyburton**



**Cooper Schoone**



**Anand Hande**



**David Niu**



**Nico Rotundo**

**Pictures of recent Master students**



**Ariel Glassberg**



**Geneva Hall**

**Picture of recent PhD student**



**Aidan Young**