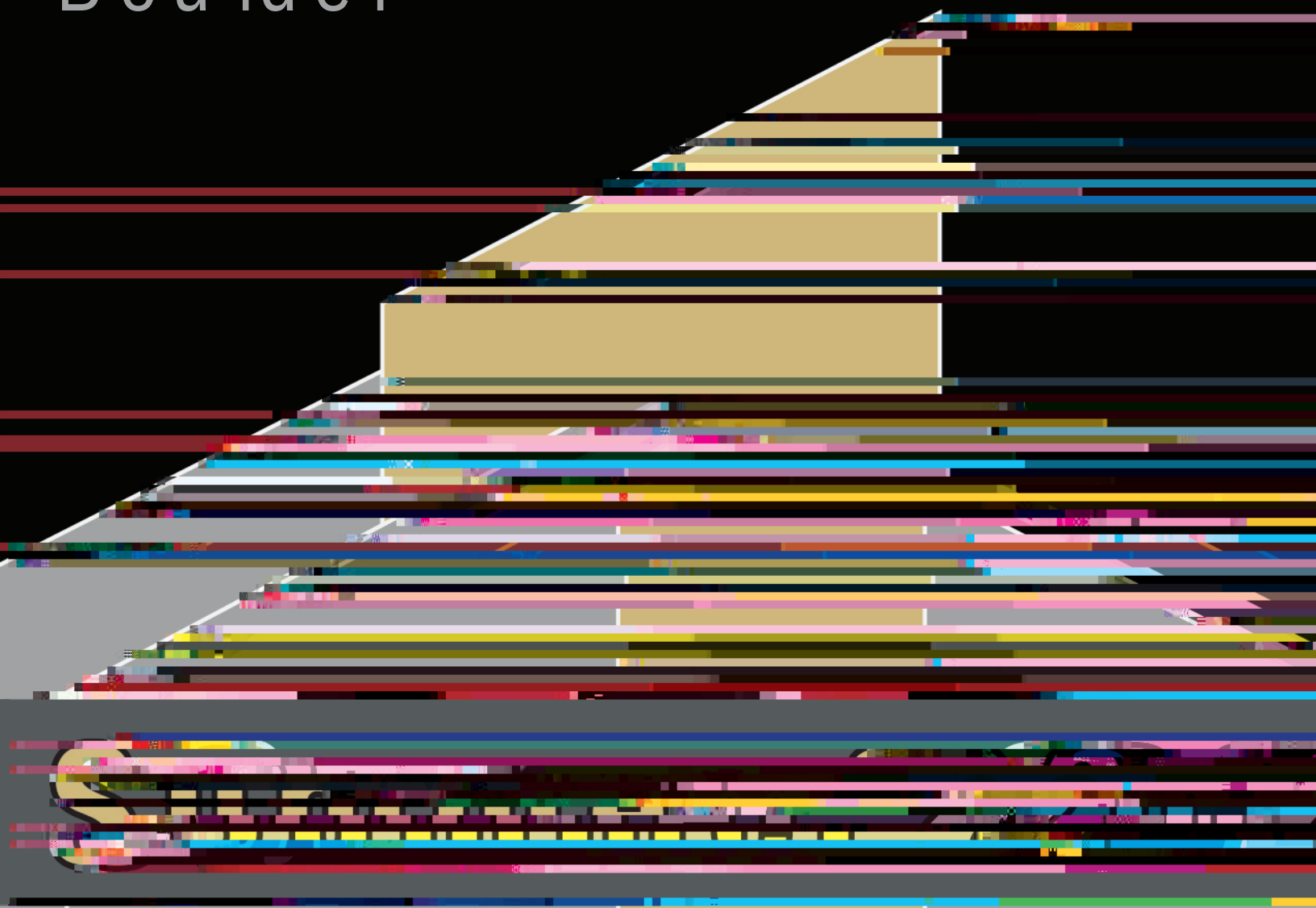
Applied Mathematics Newsletter

University of Colorado at Boulder



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Letter from the Department Chair

sequences currently ofered by APPM and MATH. Furthermore,

Mathematics to be ofered by the College of Arts and Sciences; currently APPM only ofers a Bachelor of Science degree in the College of Engineering. We have also been working diligently with

Affliated Faculty

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Department Staff

Doctor of Philosophy Graduates

Sabina Adhikari
Advisor: Juan Restrepo

Caitlin Berry
Advisor: William Kleiber

Heather Lynn Cihak
Advisor: Zachary Kilpatrick

dynamics on working memory in neural feld

Kevin Michael Doherty

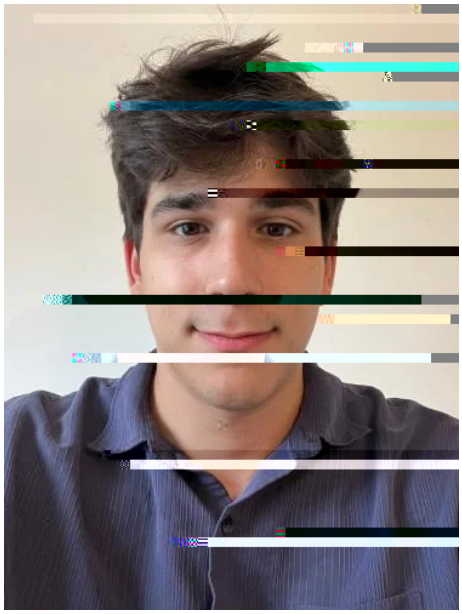
Master's Degree Graduates

Master of Science

Professional Master of Science

2023 Rudy Horne Memorial Fellowship Recipient: Ari Geisler

The Department of Applied Mathematics recently announced their 2023 recipient of the prestigious Rudy Horne Memorial Fellowship – Ari Geis-



Ari is a frst year Ph.D. student in Applied Mathematics, who graduated from Bowdoin College with a B.A. in Mathematics and Physics. Ari

setting: “I started my undergraduate career primarily interested in experimental biophysics. However, my sophomore year, I undertook a computational research project (as a result of COVID restrictions) and fell in love with the applied math methods. I remain interested in building mathematical models for problems in biophysics, especially protein-pro-

The Rudy Horne Memorial Fellowship, as stated by the Applied Math

“would, through their presence in the department, contribute to the di-

While a difcult problem to solve, fellowships like the Rudy Horne Fellowship push for diversity and bring in passionate students who are dedicated to the best interests of the feld. Bringing queer researchers in for lectures, along with organizing a plethora of other diversity-focused events, is something Ari prioritized at

“While at CU Boulder, I plan to address the heteronormativity and lack of queer representation in math by working with organizations such as Out in STEM and Spectra to bring queer researchers to campus for lectures … I am very honored to have received the Rudy Horne Fellowship. Starting a PhD is a daunting

for the Rudy Horne Fellowship and to help with issues regarding diversity, equity, and inclusion (DEI), having served as a Student Director of the Bowdoin Sexuality, Women, and Gender Center. Furthermore, while at Bowdoin, Ari chartered a chapter of Out in STEM (oSTEM), which, as described by Ari, “is a national organization that supports queer students in STEM personally, academically, and professionally by helping students connect with faculty mentors, prepare for grad school, fnd scholarships, etc.”

“There is a severe lack of visible representation in mathematics for a number of marginalized identities. Until last year, I had never met an out queer professional in STEM, making it difcult to envision how my queer identity could realistically coexist with a **The Rudy Horne Fellowship is a warm reminder that I belong in the program and my perspective is valued.”**

- Ari Geisler

Professor James Curry Part of 5G Hidden Operation though Securing Traffc (GHOST)

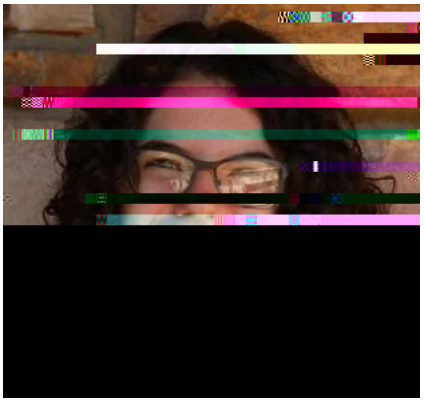
Late last year, the National Science Foundation's Convergence Accelerator program awarded $5 million to the 5G Hidden Operation though Securing Traffc (GHOST) team (shown below) at the University of Colorado at Boulder, which includes Applied Mathematics's own Professor James Curry.

The purpose of GHOST is to eliminate the possibility of external organizations using cellular network data to fnd cell phone user data, such as physical position, with on-device software. Anonymizing user data is critical for civilian and military usage to keep users safe from unwanted tracking and

Keith Gremban, the principal investigator of the project, notes that GHOST is "obviously important for soldiers but it's so much more than that. A lot of companies and nonprofts operate in regions of the world that are less than stable. There have been a rash of kidnappings of corporate executives in

NSF's funding of GHOST is published on the College of Engineering and Applied Sciences _____, which contains more information about the GHOST project and the team behind the

SIAM Student Paper Prize Recipient: Dr. Heather Lynn Cihak



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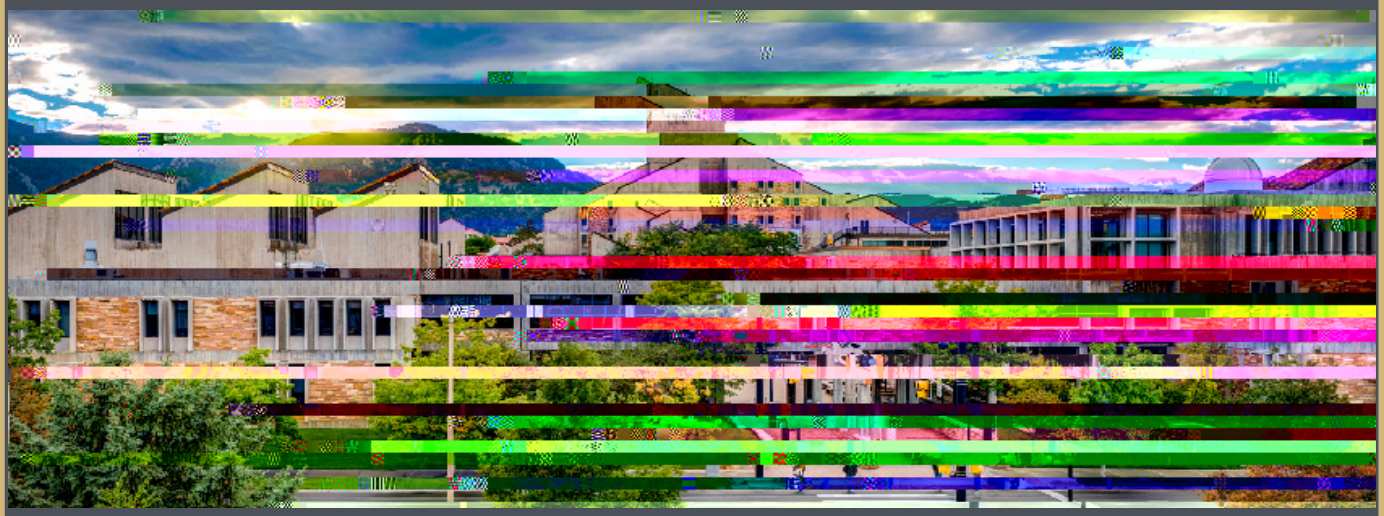

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