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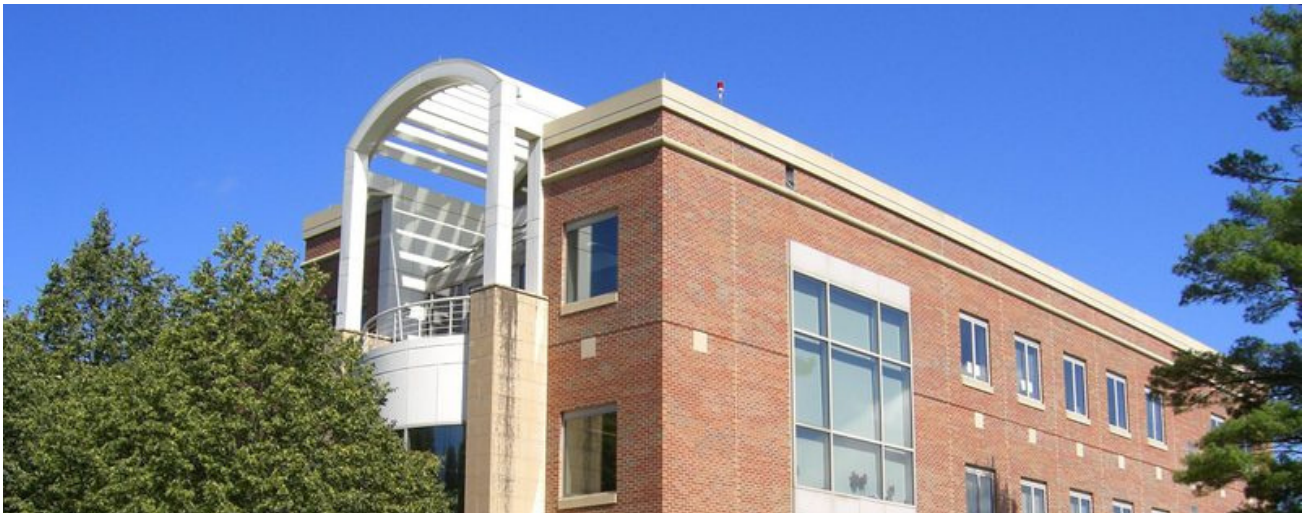
GOODSELL GAZETTE



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Math and Stats Colloquium

Speaker: Michelle Chu (U. of Minnesota)
Date: Tuesday, October 3, 2023 (Week 4)
Time: 4-5 pm
Where: CMC 206

Title: Virtual properties of hyperbolic manifolds

Abstract: A virtual property of a manifold is a property satisfied by a finite cover of the manifold. In this talk I will introduce and motivate the study of virtual properties from both the topological and algebraic perspectives while also discussing some interesting results at the intersection of topology, geometry, and group theory.

Kudos for Professors

Rafe Jones, Professor of Mathematics,
was recently awarded an American Mathematical Society-Simons Research Enhancement Grant for Primarily Undergraduate Institution Faculty. This grant will enable Prof. Jones to connect with collaborators, and will help nourish existing research projects and create new directions for the coming years. In particular, Prof. Jones plans to use the funds to travel to collaborate with colleagues at Amherst College, Texas State University, and Towson University.

Claire Kelling, Assistant Professor of Statistics,
has received two grants from the National Science Foundation (NSF). Prof. Kelling's conference grant will provide support for participants attending the Statistical Challenges in the Analysis of Police Use of Force forum, which will be held at Carleton in November. The forum will foster interdisciplinary collaboration that is crucial to the development of innovative, data-driven approaches to address the complex issue of police use of force and will highlight unique approaches and perspectives to improve the quality of evidence used to inform reform efforts. The forum is part of a workshop series, hosted by the National Institute of Statistical Sciences, called "Statistics Serving Society."

Prof. Kelling's Launching Early-Career Academic Pathways in the Mathematical and Physical Sciences (LEAPS-MPS) grant will support her research project, “Development of Models in Spatial Statistics for Complex Policing and Social Science Applications." This research will lead to the development of methods to better capture spatial uncertainty and incorporate the complexities of increasingly rich spatial data in the social sciences. This project, which includes funding each summer for undergraduate student researchers, will allow Prof. Kelling, other researchers, and community members to better answer research questions relevant to public policy.

MurphyKate Montee, Clare Boothe Luce Assistant Professor of Mathematics,
has received a National Science Foundation LEAPS-MPS grant for her two-year project, “Cubulation and Property (T) in Random Groups." Prof. Montee's grant also includes funding to support her ongoing efforts to promote inclusivity and a sense of community among under-represented individuals within mathematics through groups such as Gender Minorities in Math and Stats.

Caroline Turnage-Butterbaugh, Assistant Professor of Mathematics,
has been awarded a CAREER grant for her project "Research in and Pathways to Analytic Number Theory." The NSF describes the CAREER program as its "most prestigious award in support of early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization."

Throughout the five-year period, Prof. Turnage-Butterbaugh will conduct research focusing on long-standing open problems in analytic number theory. In addition to the research objectives, she will author “Pathway Projects” to provide novel, comprehensive guides to areas of active research in analytic number theory, and implement an educational program to work with Carleton students at the beginning of their college level mathematical training.

Shout Out for Stats Students

Some stats students (current and alums) were very successful in this year's **Undergraduate Statistics Research Project (USRESP)** Competition. This competition is sponsored by the American Statistical Association (ASA) and the Consortium for Advancement of Undergraduate Statistics Education (CAUSE).

2023 Spring USRESP Winners

Standing	Authors	Title	Institution	Faculty Sponsor	Project
1st	Elijah Jones, Ton Meesena, Sam Rosenberg, Teagan Johnson	Classification Models For Statistical Graphics	Carleton College	Adam Loy	View
3rd	Zhihan Yang	County-Level And Point-Level Analysis Of The Relationship Between Political Inclination And Frequency Of Electric-Vehicle Charging Stations In New England	Carleton College	Claire Kelling	View
Honorable Mention	Benjamin Griesel-Costales	Spatial Distribution Of Excess Deaths Due To Covid-19 In Ecuador: Socioeconomic Disparities In Ecuadorian Provinces	Carleton College	Claire Kelling	View

Undergraduate research and internship symposium

This year's Undergraduate Research and Internship Symposium will be held in the **Weitz Commons**, from **4:30 pm to 6:30 pm, on Friday, October 13**. As was the case last year, to accommodate the large number of posters we anticipate, and to give student presenters a chance to see some of the other posters, each poster will be presented in one of two sessions. The first session will be from 4:30 pm to 5:15 pm, then there will be half an hour of transition time, and the second session will be from 5:45 pm to 6:30 pm.

Statistical Forum on Policing at Carleton

The National Institute of Statistical Sciences (NISS) and Carleton College are pleased to announce an in-person forum in the Statistics Serving Society series, titled "Statistical Challenges in the Analysis of Police Use of Force." It will be held from **November 9-10, 2023** in the Weitz Center for Creativity. During the in-person forum, we hope to shed light not only on unique approaches and perspectives in this area, but also to suggest steps that statisticians and researchers should consider that might aid in a deeper understanding of these issues and provide better evidence to inform reform efforts.

Carleton students are welcome to attend to gain exposure and participate in discussion about how statistics can be used in a social justice context, as well as make potential future research connections. This forum will facilitate new collaborations that advance statistical methodology for analyzing police use of force.

All interested Carleton students may attend for free but must register at this link. Carleton faculty/staff can register at this link.

Grad School Info Event

Undergraduate Student Guide for Grad School: PhD & MS Programs in Stats, Biostats & Data Science Degrees!
Friday October 6, 2023 at 12 pm - 1:30 pm ET

Are you an aspiring data enthusiast looking to take your passion to the next level? Join us for an informative and inspiring event tailored specifically for undergraduate students interested in pursuing advanced degrees in Statistics, Biostatistics, and Data Science!
Event Highlights
- Exploring Grad School Paths: Discover the diverse array of opportunities that advanced degrees in Statistics, Biostatistics, and Data Science can offer. Learn about the unique career trajectories, research areas, and real-world applications that await you in these exciting fields.
- Program Overviews: Get an in-depth look at renowned PhD and MS programs from esteemed institutions. Representatives from top universities will present comprehensive overviews of their programs, covering curriculum details, faculty expertise, research facilities, and more.
- Application Insights: Receive valuable tips and strategies for crafting a compelling application package that stands out to admissions committees. From personal statements to letters of recommendation, our experts will guide you through the key components of a successful application.
- Interactive Q&A Session: Participate in an interactive Q&A session with experienced professionals and academic advisors. Gain firsthand knowledge about the challenges and triumphs of pursuing an advanced degree in these fields, and have your burning questions answered.
- Don't miss out on this golden opportunity to set your grad school aspirations in motion! Whether you're curious about the research landscape, eager to hear success stories, or seeking guidance on your next steps, this event is designed to empower you with the knowledge and connections you need to thrive in the world of advanced statistical studies.

Registration is free! Secure your spot today and embark on a journey towards a future fueled by data-driven excellence.

We look forward to welcoming you to an event that could shape your future in the world of Statistics, Biostatistics, and Data Science.
www.niss.org/events/...

What do our Majors do when they Graduate?

What do you want to do with your Math or Stats major? Do you get asked that all the time? Find out some possible answers by looking through the new version of the Blue Book! Our departmental Blue Book is a list of the responses to a survey from over 100 math or stats graduates from the past 11 years. Read about how they found their jobs. Read about how they did in graduate school. Read about the decisions they made after graduation. As an added benefit, almost all alumni give their contact information and welcome current students to reach out and ask questions and make connections.

Two copies of the Blue Book are available for you to peruse -- one in the foyer outside Sue Jandro's office and one in the MAST Student Space, CMC 201. Please read and enjoy the books in those spaces and leave them there.

Jobs, Internships, and Other Opportunities

*Unless otherwise noted, full-time roles in this section have expected start dates in 2024.

Internships

Global Data Strategy Intern (2024 Summer)
Ameriprise Financial. Due Thursday, October 5.

Summer Analyst Intern - General (2024 Summer)
Analysis Group. Due Saturday, October 14.

*For more information, please visit the Carleton Career Center!

Editors: Joyce Li, Caroline Turnage-Butterbaugh
Web & Subscriptions: Sue Jandro