

## PNW MAA Spring Meeting: George Fox University

2023 PNW Sectional MAA Meeting George Fox University March 17-18, 2023

George Fox University, including the School of Natural Sciences and the Mathematics Department, is proud to host the 2023 Spring Meeting of the Pacific Northwest Section of the Mathematical Association of America. Our faculty and students are excited to support the section's activities which promote vigorous research and dynamic teaching and learning in our region. George Fox University is located in Newberg, OR. The university's 108-acre main campus also hosts graduate programs and features residence halls, the lush Hess Creek Canyon, and facilities for academics, athletics and performing arts. Please accept our warm welcome to Newberg; we hope you enjoy all we have planned as we continue in-person section meetings. Please e-mail Corban Harwood (rharwood@georgefox.edu) if you have any questions regarding the meeting.



Abstracts for all presentations are due Friday, February 17, 2023. Please email Corban Harwood (rharwood@georgefox.edu) with subject line "Abstract for PNW MAA 2023" and cc the Special Session organizer for consideration in their session. Include type of abstract submission, title, and abstract (limit 100 words). The conference webpage has a LaTeX template. All talks are 15 minutes plus 5 minutes Q&A.

The deadline for regular registration is Friday, March 3. After that date, all registration rates will go up by \$10. There will be limited onsite registration and those registrants will pay an additional late charge. Please use this online registration form!

Until Feb 13, the organizers have arranged for a reduced rate of \$139/night at the Holiday Inn Express: Newberg - Wine Country, 501 Sitka Avenue, Newberg, OR, US. See the conference webpage for the direct booking link for the "George Fox University - PNW MAA Section Meeting" block of rooms.

\*Individual reservations can be canceled and/or modified up to 14 days prior to the date of arrival by 3:00 PM local time without penalty.

\*Check-in time is 3pm and check-out time is 11am.

For more information visit the conference webpage: https://georgefoxuniversity.regfox.com/pacific-northwest-section-of-the-mathematical-association-of-america.

See page two for program highlights.



Mathematical Matters

## PNW MAA Spring Meeting: George Fox University - Program

Program highlights include

- Themed and contributed sessions
  - Alternative Grading. *Stuart Boersma* (Stuart.Boersma@cwu.edu) and *Jean Marie Linhart* (JeanMarie.Linhart@cwu.edu), Central Washington University
  - Topics in Undergraduate Mathematics Education. Sarah Kerrigan (skerrigan@georgefox.edu) and Nicole Enzinger (nenzinger@georgefox.edu), George Fox University.
  - Modeling in the Classroom. David Hammond (David.Hammond@oit.edu), Oregon Institute of Technology
  - Applied Mathematics. Diana Schepens (dschepens@whitworth.edu), Whitworth University
  - Differential Geometry & Topology. Christine Gunther (guenthec@pacificu.edu), Pacific University
  - Mentoring Undergraduate Research. *Katharine Shultis* (shultis@gonzaga.edu), Gonzaga University and *Allison Henrich*, Seattle University
  - Algebra & Linear Algebra. Pietro Paparella (pietrop@uw.edu), University of Washington Bothell
- Four plenary talks, including Friday talk open to the public
  - Geometry of the Earth and Universe with The Simpsons and Futurama. *Sarah Greenwald,* Appalachian State University
  - Rubik's Cube Games on Spheres. Sarah Greenwald, Appalachian State University
  - Beauty at the heart of the mathematics classroom. Matt DeLong, Marian University
  - Students considering Non-Academic Careers? Help! Allen Butler, Daniel H. Wagner Associates, Inc.
- Mini-course (additional fee \$15)
  - Intro to R for Data Analysis. *Heather Kitada*, Willamette University. *No experience in R expected*.
- Project NExT workshop for current fellows and invited guests
- Info session for prospective graduate students
- Career-focused and social activities for undergraduates
- Pizza and student activities Friday night
- Saturday lunch and Saturday evening reception provided

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### NExT News: Spring Meeting

by Megan Buzby

The Section NExT portion of our section meeting is Friday, March 17, 2023. The deadline for submission of abstracts for presentations, panels, or discussions is Friday, February 3. Please send submissions to Megan Buzby (mbuzby1@alaska.edu). Details about the program will be forthcoming on the Section NExT listserv.



Mathematical Matters

### University Spotlight: George Fox University

by Corban Harwood

Incorporating the Business Analytics certificate, the new Mathematics & Data Analytics major at George Fox prepares students to love God through critical thinking, love others through collaborative problem solving, be known through mathematical modeling, and seek meaning in Big Data via statistical analysis. This synergy with business and computer science provides a clear pathway into a high-need job market for data analysts, digital analysts, business analysts, data scientists, and software engineers. Other careers, like teaching and mathematical research, are strengthened by familiarity with data analytics and its utility in the business world.

"I will extend my internship with Drive Time into a full-time data analytics job for a while, but I might transition from sales into health care to do more meaningful work." - *Keaton Roberge, senior mathematics major and Honors fellow.* 

"After getting a Masters in Teaching,

I will teach math and coach football at my high school back home. I want to be the kind of role model that inspired me." - Leon Johnson III, senior mathematics major and First Team All-American

#### A note from the editor

by KATE KEARNEY

If you have any major changes in your department or University, I'd love to highlight them in an upcoming "University Spotlight" column. Please email me with any contributions or other section news.

#### 2023 Pacific Inland Mathematics Undergraduate Conference

Saturday April 1st, 2023 Gonzaga University, Spokane, WA

2023 is the 6th year of the annual Pacific Inland Mathematics Undergraduate Conference. The purpose of this conference is to provide a Spring venue for undergraduates in the Inland Pacific Northwest to present work on their Senior Capstones, Individual Research Projects, Original Solutions to COMAP, and other Mathematical Contests. Many of the Universities and Colleges in the Pacific Inland Region (off the I-5 corridor) are isolated. The goal of this conference is to provide an opportunity for undergraduate students from those universities and colleges to meet each other, show off their hard work, and bond over their love of Mathematics. Please consider joining us at this year's conference, in person, at Gonzaga University on Saturday April 1, 2023. All areas of original undergraduate mathematical work are permitted and encouraged. Students have the option of presenting a 20 minute talk or a poster.

https://sites.google.com/view/pimuc/home

#### KRYPTOS: A Series of Cryptanalysis Challenges, April 20 – 24, 2023

KRYPTOS is a contest open to undergraduate and high school students. The theme of the contest is centered around the breaking, or cryptanalysis, of ciphers (secret writing). Each challenge presents contestants with a brief scenario together with some ciphertext (encoded message). The goal is to discover the original plaintext message!

While it is not the intent of this contest to test overly technical aspects of cryptanalysis or advanced mathematical algorithms, some familiarity with basic codemaking and codebreaking is certainly helpful. See the KRYPTOS web page for some helpful resources.

We had over 160 students participate last year and many have been clamoring for more! Please announce this contest to your students! Cool prizes are sent out to first and second place winners!

Visit the competition site for more information – including instructions on registering students for the contest.

Registration will begin in early March. KRYPTOS is sponsored by the MAA Pacific Northwest Section with Central Washington University and Western Oregon University.



Mathematical Matters

#### Great Puzzle Hunt

The 7th Annual WWU Great Puzzle Hunt: Saturday, April 15, 2023, 9:30 AM – 5:00 PM (PT)



The WWU Great Puzzle Hunt is a fun, full-day, team puzzle-solving event that is OPEN TO ALL, anywhere in the world! The event is hybrid with options to play in-person or virtually. Teams of up to 6 work virtually or travel on foot to various locations on WWU campus solving a total of four hour-long puzzles, gathering clues along the way to solve one final meta puzzle. The

event is FREE, but donations are gratefully accepted, and registration is required. Registration ends 11:59 pm April 13, 2023 or earlier if capacity is reached. Be a part of the fun!

You can also visit our website: https://www.greatpuzzlehunt. com/



# Pacific Inland Mathematics Undergraduate Conference

Looking for a **Spring Term** opportunity to present your research?

Undergraduates at Universities and Colleges throughout the Pacific Inland Region are invited to participate in the sixth annual Pacific Inland Mathematics Undergraduate Conference. Talks and Posters accepted.

> Saturday, April 1, 2023 In-Person at Gonzaga University

Website & Registration:

https://sites.google.com/view/pimuc



