

PNW MAA Spring Meeting: Western Washington University

2022 PNW Sectional MAA Meeting
Western Washington University
April 1-2, 2022

The conference will begin Friday April 1 with Section NExT activities in the morning, minicourses in the afternoon, followed by a reception for prospective graduate students and an evening public lecture. Saturday April 2 will include invited speakers, MAA special sessions, contributed talks, opportunities for students to present their work and an evening reception. Also on Saturday, undergraduates will have the opportunity to network with professionals in a variety of fields who graduated with math degrees in the last five years and participate in an activity focused on career exploration and preparation for job interviews. While the conference will be held in person at Western Washington University, there will also be opportunities for remote participation. We are very much looking forward to the first in person section meeting since 2019.

This meeting's plenary speakers are:



Jennifer Quinn – Dr. Jennifer Quinn is President of the Mathematical Association of America (MAA) and professor of mathematics at the University of Washington Tacoma. She will speak about *Digraphs and Determinants*.



Talea Mayo – Dr. Talea Mayo is a computational mathematician with expertise in the development and application of numerical hydrodynamic models for coastal hazards. She will speak on *Mathematics Applied: the Use of Computational Models to Understand Climate Change Impacts to Storm Surge Risk*.



Emilie Purvine – Dr. Emilie Purvine is a Senior Data Scientist at Pacific Northwest National Laboratory. Her research is focused on applications of combinatorics and computational topology together with theoretical advances needed to support the applications. Her talk will be on *Mathematics for Cybersecurity*.

Western Washington University (WWU) is in Bellingham, Washington. More information (including details about COVID precautions) and registration available on the webpage: <https://mathematics.wwu.edu/pnw-maa-2022>

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Congratulations Nancy Ann Neudauer - MAA Associate Secretary

by MICHAEL BOARDMAN

Congratulations to our colleague Dr. Nancy Ann Neudauer, the new Associate Secretary of the MAA. We are excited, as Dr. Neudauer will bring enthusiasm and extensive experience to this position.

Dr. Neudauer is Professor of Mathematics at Pacific University where she currently holds the Holce Professorship in Science. Dr. Neudauer studied under Dr. Richard Brualdy and earned her Ph.D. from the University Wisconsin. She is the author or co-author of dozens of research and expository articles, and is a sought after plenary speaker. Supported by an extensive collection of grants including Fulbright awards, Dr. Neudauer has traveled around the world promoting the mathematical sciences and working with both accomplished and budding mathematicians. Her work with the African Institute of Mathematical Sciences is particularly noteworthy. Dr. Neudauer, sometimes taking Pacific University students, has worked in locations such as Cameroon, Tanzania, Ghana, and South Africa.

Until the start of her role as Associate Secretary, Dr. Neudauer was the Program Director for the Dolciani Enrichment Grants with MAA.

She is a fixture in the Pacific Northwest Section of MAA having served in numerous capacities including as Governor. She has been a central player in Project NExT, both regionally and nationwide. And, in keeping with her work at promoting the mathematical sciences, at Pacific University, Dr. Neudauer shines at involving students in mathematical competitions and activities, and in motivating them to attend and present at regional and national conferences.

Congratulations Dr. Neudauer!

Congratulations Allison Henrich - MAA Focus Editor

by DYLAN HELLIWELL

This note is to congratulate Dr. Allison Henrich as the new Editor for the MAA FOCUS. Allison will do a great job in this role, owing to her broad experience as a scholar, teacher, and community builder.

Allison's mathematical scholarship lies in knot theory and while the mathematics itself is quite interesting, a more striking pattern also emerges: a review of her extensive record of research papers, invited addresses, expository papers, books, and presentations demonstrates a steady trend toward collaboration with a rich network of scholars at all levels. This includes other experts in knot theory, younger researchers, graduate students, undergraduates, and even the occasional high school student. Allison's ability to find broadly appealing problems that are accessible to people with such a wide variety of backgrounds speaks to her creativity, generosity, and energy. For these reasons, Allison was awarded the MAA Paul R. Halmos – Lester R. Ford Award twice (!), in 2015, and then again in 2020. Allison is an inspiration for anybody who wants to interpret mathematical research inclusively, both in terms of what can be studied and who can study it.

This philosophy that mathematics should be interpreted broadly and

should be broadly accessible manifests also in Allison's teaching. At Seattle U, Allison teaches across our curriculum, from undergraduate research and topics courses for advanced math majors, through calculus, to our quantitative reasoning "Core" courses for students not pursuing a degree in a quantitative field. Allison shares her enthusiasm for math and the joy of discovery at all levels, and students respond to it strongly, evidenced for example by the fact that on multiple occasions, students taking her Core course decided to become math majors. The MAA recognized Allison's work in this area by awarding her with the Alder Award for Distinguished Teaching in 2015, and she continues to be a favorite professor among math majors and non-math majors alike.

Underlying all of Allison's work as a scholar and as a teacher is a deep commitment to the idea that mathematics is a communal endeavor, and her success follows in large part from the fact that she can make anybody feel like they are a welcome member of our community. Whether this is in the form of inviting a new 1st year student into her research group, interviewing colleagues for an MAA Math Values blog, or working with a new fellow faculty member to create goodie bags for math majors, she makes people KNOW that they are valued and their contributions matter.

I am lucky to have Allison as a part of our local community in the Math Department at Seattle University, and I know she will do an amazing job as Editor of the MAA FOCUS, helping to support our global community in the broadest sense possible.

NExT News

by MEGAN BUZBY

The Section NExT portion of the annual meeting will occur on Friday. The program will include discussions and presentations such as

growth-minded grading techniques, pandemic-induced change, developing research for undergraduates as a new faculty member, and research highlights from faculty. Please attend if you are a PNW NExT member, in person if you can. National NExT

members are also welcome.

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. As we move into the next school year, I also hope to feature any retiring faculty, and any new faculty in our section. Please email me with any contributions, including news about faculty in your department, or other section news.

2022 Pacific Inland Mathematics Undergraduate Conference

Saturday April 9th, 2022

Washington State University, Pullman, WA

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 annual Pacific Inland Mathematics Undergraduate Conference. We are planning for an in-person conference event on the Pullman campus of Washington State University. However, the conference planning committee will continue to follow local and state recommendations as the date draws nearer.

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

KRYPTOS: A Series of Cryptanalysis Challenges, April 21 – 25, 2022

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 orig-

inal 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 120 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.

Great Puzzle Hunt

The 6th Annual WWU Great Puzzle Hunt: Saturday, April 9, 2022, 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! This year, in the interest of safety, the event is hybrid with both in-person participation (available to the WWU campus community only this year) and virtual options. 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 this year, but registration is required. Registration ends 11:59 pm April 8, 2022 or earlier if capacity is reached. Be a part of the fun!

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