

Department of Mathematics, Statistics, and Computer Science St. Olaf College, Northfield, MN 55057 10 December 2021 | Volume 50, No. 11

Today's Seminar

Title: Brauer Graph Algebras

and Voltages

Speaker: Prof. Adam Wood '16
Date: Friday, December 10

Time: 3:30pm Location: RNS 204

About the talk: This talk will introduce the notion of a Brauer graph and a certain algebra arising from a Brauer graph, called a Brauer graph algebra. This type of algebra appears in the representation theory of finite groups over fields of prime characteristic and has been the object of much study. After an overview of Brauer graph algebras, we connect Brauer graph algebras with voltage graphs, and describe a family of maps involving Brauer graph algebras using this connection. We also discuss current work on enumerating

the number of isomorphism types of certain Brauer graphs.

About the speaker: Adam is currently in his second year as a visiting assistant professor at St. Olaf. He earned his Ph.D. from the University of Iowa in 2020. His main research area is in the representation theory of finite groups, where one uses the power of linear algebra to study objects related to finite groups.

MSCS Relaxation Station

In case you haven't heard, final exams are coming up... But don't worry, the MSCS department is here to help you get through this time of the year! On **December 16, 17, 20, and 21**, beginning at 8am each day, the 3rd floor of RMS (Regents Math) will have a variety of treats available to you. Stop by and grab a snack as you wish - and *good luck with your finals!*

To submit an article, event, or anything else for publication in the Mess, email mcgowa2@stolaf.edu; to receive the Mess digitally each Friday, email habero1@stolaf.edu; visit http://wp.stolaf.edu/mscs/mscs-mess/for a digital archive of previous MSCS Mess issues.

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