

MSCS Mess

Department of Mathematics, Statistics, and Computer Science
St. Olaf College, Northfield, MN 55057

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<http://wp.stolaf.edu/mscs/mscs-mess/>

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MSCS Research Seminar

Title:	Russian Troika Dolls: A Story of Demazure Module Filtrations
Speaker:	Peri Shereen
Date:	Monday, April 11
Time:	3:30- 4:30 pm
Location:	RNS 310

About the talk: A composition series of vector spaces is a chain of subspaces such that each successive quotient space has no nontrivial subspaces. A similar definition also exists for groups. In both cases, knowing the composition series gives us some structural information of the largest space or group. For example, the composition series of a finite abelian group is directly related to its decomposition. We will discuss a similar notion for modules of a Lie algebra. In particular we will study a filtration (a chain of submodules) where the successive quotients share a common property. Learning about the explicit filtrations admitted will give us important structural information about the largest module.

About the speaker: Peri Shereen is a Visiting Assistant Professor in the Mathematics and Statistics Department at Carleton College beginning Fall 2015. She received her doctorate in the area of Lie Algebras and Representation Theory under the supervision of Dr. Chari. Her academic journey has included experience in international

education. After completing her undergraduate degree in Mathematics (with a minor in French), she spent some time in France as an English assistant at a junior and secondary high school. After her tenure in France, she returned to the United States and earned a Master's degree in International Peace and Conflict Resolution at American University. While completing her degree, her interest in mathematics was rekindled. And so, following her first graduate degree, she completed a second Master's, this time in mathematics at CSU Long Beach. Her teaching experience at CSU Long Beach was incredibly rewarding. It was her interest in both teaching and doing research in mathematics that motivated her to continue to broaden her mathematical education and work towards earning her Ph.D.

Math Research Course

Prof. Tina Garrett will be teaching the Math Research Course, Math 396, in the fall. This course is an opportunity to work with a small team on an open research problem. You will learn some cutting edge combinatorics and investigate a problem as a team. It is appropriate for anyone who has completed Abstract Algebra and is interested in seeing how math research is done. For more information, email Prof. Garrett at garrettk@stoalf.edu or stop by to chat.

Senior Salute

The MSCS Mess has traditionally dedicated the last issue of the year to the graduating seniors of the MSCS Department. As a continuation of this

*If you would like to submit an article or event to be published in the MSCS Mess, e-mail khan@stolaf.edu
If you wish to receive a digital copy of the MSCS Mess every Friday, e-mail martinep@stolaf.edu or check it out online*

tradition, we ask all senior math, CS and statistics majors to send in the following information to Akina Khan (khan@stolaf.edu) no later than May 5:

- Name
- Major(s)/Concentration(s)
- Your plans after graduation

From the Editor

Q: What do you call a young eigensheep?

A: A lamb, duh!

Editor-in-Chief:	Akina Khan
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