

# MSCS MESS

Department of Mathematics, Statistics, and Computer Science  
St. Olaf College, Northfield, MN 55057  
September 30, 2016 Volume 45, No. 3

---

## Next Friday's Research Seminar

Title: The Curious Case of 2s and 3s  
Speaker: Matt Richey  
Time: Friday, October 7, 3:40 pm  
Place: RNS 204

**About the talk:** As often happens, looking at a problem from one perspective leads to unexpected results when seeing it from another perspective. In this talk, we will explore a concept inspired by a classroom exercise in a chemistry class that reveals a "curious" phenomenon in number theory. Along the way, we'll get to see how concepts such as the Boltzmann distribution, Markov chains and enumerative combinatorics intersect with each other.

**About the speaker:** Matt Richey is a long time member of the MSCS department. After starting out in mathematical physics, he gradually (and not too elegantly) migrated into applied mathematics, parts of computer science, and even a dabbling of statistics. Recently, he has found very little fame but some fortune predicting sports outcomes using Bayesian probabilistic models.

## Game Night Extravaganza

On Thursday, October 6<sup>th</sup> from 7 to 9pm, the MSCS department will hold a game night. Help celebrate the MSCS department's additions to our massive game collection by joining us for a giant game night on the 6<sup>th</sup> floor of Regents-Math. We'll have lots of games to play, plenty of Doritos, Oreos, and other snacks to eat, Mountain Dew and other things to drink, and maybe even some pizza! Bring your friends and challenge a professor or two to a game of Settlers of Catan, Dominion, cribbage, or whatever catches your eye.

## In case you don't have enough math in your life...

Consider a collection of 5 points in the plane such that no three are collinear. Try to come up with a geometric proof that four of those points are the vertices of a convex quadrilateral.

If you like this problem, you are not alone. Esther Klein gave a proof to her friends in 1933 that was very well-received, at least by fellow mathematician George Szekeres, who promptly proposed to Klein.

*To submit an article or event for publication in the Mess, email [brooke@stolaf.edu](mailto:brooke@stolaf.edu); to receive the Mess digitally each Friday, email [martinep@stolaf.edu](mailto:martinep@stolaf.edu); visit <http://wp.stolaf.edu/mscs/mcs-mess/> for a digital archive of previous MSCS Mess issues.*

Corey Brooke, Editor  
Bruce Pell, Faculty Adviser  
Patty Martinez, Mess Czar