This Week's Colloquium

Title: A Rational Approach to Picking a Random Fraction (pun intended)
Speaker: Adam McDougall
Date: Tuesday, March 16th
Time: 1:30pm
Location: RNS 410

About the Talk: What does it mean to choose a number 'at random'? This question is frequently asked for whole numbers, but rarely for fractions. For whole numbers, the answer(s) to this question are well known. We will mimic these results to answer similar questions about random fractions.

About the Speaker: Adam grew up in the Twin Cities and is a 2005 Saint Olaf alum. After graduating from St. Olaf, he moved south to the University of Iowa to obtain a Ph.D. in Mathematics. His main research is in knot theory, but he enjoys many areas of math. Adam also enjoys puzzles, games, and spending time with family.

Puzzle

Fill in the blanks so that the following is true:
“This sentence has __ 0's, __ 1's, __ 2's, __ 3's, __ 4's, __ 5's, __ 6's, __ 7's, __ 8's, and __ 9's.”

Special Visiting Speaker

Dr. Andrew Odlyzko, Professor of Mathematics, Director of the Digital Technology Center, Assistant Vice President for Research at the University of Minnesota, will be giving a public talk, suitable for a general audience. Dr. Odlyzko's is a nationally renowned speaker and mathematician whose visit is being funded by the National Office of Phi Beta Kappa in cooperation with St. Olaf's Kleber-Gery Fund. His visit is a rare opportunity for us to hear from a true leader in the national mathematics community.

Title: Technology manias: From railroads to the Internet and beyond.
Date: Thursday, March 18th
Time: 7:30pm
Location: Holland Hall 501

About the talk: A comparison of the Internet bubble with the British Railway Mania of the 1840s, the greatest technology mania in history, provides many tantalizing similarities as well as contrasts. Especially interesting is the presence in both cases of clear quantitative measures showing a priori that these manias were bound to fail financially, measures that were not considered by investors in their pursuit of "effortless riches." In contrast to the Internet case, the Railway Mania had many
vocal and influential skeptics, yet even then, these skeptics were deluded into issuing warnings that were often counterproductive in that they inflated the bubble further.

The role of such imperfect information dissemination in these two manias leads to speculative projections on how future technology bubbles will develop.

This talk is jointly sponsored by the Phi Beta Kappa Visiting Scholars Fund and the Kleber-Gery Fund.

About Dr. Odlyzko: Andrew Odlyzko is a professor in the School of Mathematics at Minnesota, where he was at various times between 2001 and 2008 the founding director of the interdisciplinary Digital Technology Center, interim director of the Minnesota Supercomputing Institute, assistant vice president for research, and the ADC Telecommunications Chair Professor. Before moving to Minneapolis in 2001, he did research and research management at Bell Labs and AT&T Labs.

His work ranges from pure mathematics to communications, computer science, security, electronic commerce, growth of the Internet, and technology manias. Of particular interest is his research on zeros of the Riemann zeta function and their connections to prime numbers and quantum chaos; as well as his work on breaking knapsack cryptosystems, debunking the myth of Internet traffic doubling every 100 days, and demonstrating that connectivity has traditionally mattered much more for society than content. A current project is in economic history, comparing the Internet bubble to the British Railway Mania of the 1840s and exploring implications for future bubbles and technology diffusion in general.

Degrees: B.S., M.S. California Institute of Technology 1971, Ph.D. Massachusetts Institute of Technology 1975.

Is There A Progressive Dinner In Your Future?

A progressive dinner is an event in which groups of diners move from one venue to another as they eat their way through a multiple course dinner. Five MSCS faculty (Richard Allen, Adam Berliner, Olaf Hall-Holt, Steve McKelvey and Katie Ziegler-Graham) have decided to jointly host a progressive dinner for groups of MSCS students. Here's how it will work:

1. MSCS Students will organize themselves into disjoint groups of six and apply for the dinner.
2. We will accept as many student groups as we can handle.
3. Each student group will enjoy appetizers at one home, a main course at a second, and move to a third home for dessert. Each course will feature home cooked food. All the faculty homes are in Northfield--each group must arrange for its own transportation between homes. (Walk, bike, drive, etc.)

This event is scheduled to begin at 5:00pm on Saturday, April 17th and should be concluded by approximately 8:00pm that evening, leaving plenty of time for students' normal Saturday evening activities and also somewhat before faculty members' bedtime.

If you are interested in participating in this gala, please set about organizing a group of six MSCS students. Sometime very soon we will be sending, via email, a sign-up sheet to all majors and concentrators in MSCS. Fill out the form and return it to Donna Brakke in the MSCS Office (3rd floor RMS).

Questions? Please direct them to Profs. McKelvey or Hall-Holt.