

MSCS



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

February 8, 2008
Volume 36, No.13

This Week: Two Colloquium Speakers!

Title: Secret Codes and Algebra: How to Use Curves to Take Over the World
Speaker: Stefan Erickson
Date: Tuesday, February 12
Time: 1:30 -2:30pm (Treats 1:20)
Location: SC 188

Bio: Stefan Erickson is currently a professor at Colorado College. His research interests lie in number theory, particularly cryptography, the Stark Conjectures, and the Fibonacci numbers. He is also an avid hiker, backpacker, rock climber, and yoga enthusiast.

Abstract: Since ancient times, codes and ciphers have been used to transmit vital information without it falling into the wrong hands. The advent of the computer age has produced a strong demand for fast and secure cryptosystems. Today, cryptography is found in military, economic, and personal applications, including Internet commerce and digital signatures.

Most modern cryptosystems are based on computationally hard problems from mathematics, such as the factoring of the product of two large prime numbers in RSA. Recently, there has much interest in using elliptic curves as the basis for cryptosystems. After describing elliptic curves and motivating their use, we will demonstrate a variety of applications. We will also introduce hyperelliptic curves and describe a number of open questions related to their arithmetic and suitability for cryptography.

Title: TBA
Speaker: Robert Pelayo
Date: Thursday, February 14
Time: 2:30-3:30 pm (Treats 2:20)
Location: SC 188

Bio: Bob Pelayo is currently a Riley Scholar and Visiting Assistant Professor at Colorado College. He has a Ph.D. in geometric topology from the California Institute of Technology, and a B.A. from Occidental College where he majored in mathematics and psychology.

MSCS Recital

The N-th Annual MSCS Recital will be held at 7:00pm on Wednesday, April 9th in the lounge of Ytterboe Hall. More details later, but check this unique event on your calendars now. If you are interested in performing, please contact Steve McKelvey (mckelvey@stolaf.edu) to be placed on the evening's play list.

Game Night

Every Wednesday 6:30-8:00 pm in SC 188 beginning Feb. 13.

Editor-in-Chief: Kate Tummers
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If you would like to submit an article or math event to be published in the Math Mess, e-mail tummers@stolaf.edu.