Augarithms

AUGSBURG COLLEGE

vol 20.6 Visit us on the web at Augsburg.edu/math/ November 22, 2006

Mathematics Colloquium Fall Lineup

Colloquia are typically held Wednesdays from 3:40—4:40 in Science Hall 108. Refreshments are always provided.

Sep.	13	The Augsburg Mathematics Department presents itself.
Sep.	27	Huseyin Coskun, Augsburg College & School of Mathematics, University of Minnesota
Oct.	11	Amelia Taylor, Colorado College
Oct.	18	Loren Larson, St. Olaf College
Oct.	25	Matt Haines & Ken Kaminsky, Augsburg College
Nov.	8	Tracy Bibelnieks, Augsburg College[1]
Nov →	29	Richard Järvinen, Winona State University & NASA

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The bi-weekly newsletter of the Department of Mathematics at Augsburg College

Editor-in-chief.....Ken Kaminsky <kaminsky@augsburg.edu>

This week's speaker

Reliability in N-Dimensinal Aerospace: Orbit Determination

Richard D. Järvinen

Richard D. Järvinen, Ph.D.

Mathematics and Statistics Department
Winona State University

Dr. Järvinen began his professional career at Remington Rand UNIVAC in 1961 at the age of 22, having just completed a Master's Degree in mathematics at Vanderbilt University, as a researcher with the Nike Zeus anti-missile missile project. Later, during the period of his Ph.D. work in mathematics at Syracuse University, he twice served as a research scientist at the General Electric Heavy Military Electronics Division in upstate New York. There, he first engaged the topic of his talk today. His work in this area has been published in various places, e.g., Selected Studies: Physics-Astrophysics, Mathematics, History of Science (Rassias et al, editors, North-Holland, 1982).

Orbits evolve continuously, and the recent book, Statistical Orbit Determination (Tapley et al, Elsevier/Academic Press, 2004) is indicative of the importance of precision orbit determination.

Dr. Järvinen's talk on aspects of his contributions to the field will be a blend of mathematical and statistical methods, and he will use this context to help describe the nature of the field of reliability.

Dr. Järvinen has worked as a NASA Research Scientist Consultant at the NASA Johnson Space Center in Houston, Texas,in each year since 1995. Many of his NASA papers have been published; all were presented at JSC to various rocket science investigators. His efforts have largely focused on reliability and risk assessments in support of the Space Shuttle program. He was awarded a superior accomplishment award by NASA for one of his early JSC papers.

An author, his book, Finite and Infinite Dimensional Linear Space (Marcel Dekker, 1981) received one of the rare extended reviews published in the American Mathematical Monthly, and his book is listed as one of the top ten books on its subject in Library Recommendations for Undergraduate Mathematics (Steen, editor, MAA, 1992).

Dr. Järvinen has been the recipient of the Award for Distinguished College or University Teaching of Mathematics, an award given annually by the North Central Section of the MAA to a professor at one the NCS/MAA institutions. His career biography is cited in 101 Careers in Mathematics (2nd ed, Sterrett, editor, MAA, 2002).

True or False?

German born mathematician Emmy Noether (1882-1935) had a slightly younger twin sister named

Yetta Noether.

No Problem of the week...

We received answers to the problem of vol. 20.5 (*edge-length* x $\sqrt{5}$) from **Michael Janas**, **Brent Lofgren** (‘88), **Maggie Flint** (South High School), **Richard Garnett**, and **Jerry Eddy**.

Since this the last issue of the semester, there will be no Problem of the Week this week. We’ll return in January.

Puzzle of the week...

We received correct answers to the puzzle of vol. 20.5 from **Richard Garnett**, **Maggie Flint** (South High School), **Brent Lofgren** (‘88), **Michael Janas**, **Binh Nguyen**, and **Evan Fuhs**. We also received a solution from **Kristina Durivage** of Winona State University to the puzzle of volume 20.4

This the last issue of the semester, so there will be no Puzzle of the Week this week. We return in January.