Augarithms

AUGSBURG COLLEGE

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The new fall schedule is revealed...

Mathematics Colloquium Series

Unless otherwise indicated, colloquia are held Wednesdays from 3:40 - 4:40. Refreshments are provided.

Sept.	14	Kenneth Kaminsky, Augsburg College
	28	Stephen Willson, Iowa State University
Oct. →	**12***	**Juan Pablo Trelles, Univesity of Minnesota**
	26	TBA
Nov.	9	Jennifer Geis, Augsburg College
	30	Mary Laurel True, Augsburg College

*This week's talk...

Service Learning in Action: The Peru Project
by Juan Pablo Trelles, University of Minnesota

Juan Pablo Trelles

After a brief description of service learning, I will describe the Peru Project, a project I was fortunate to be part of for more than two years, including my personal experience on the logistic, socio-cultural, and engineering challenges faced.

From July of 1997 to the present, the students and faculty of the University of Massachusetts, Lowell, lead by Prof. John Duffy, have been participating in the Peru Project, a project of cooperation with the communities in north coastal and Andean Peru. Strongly focused on service-learning (the integration of academic subject matter formally with service) the project has as goals international understanding and sustainable social and economic growth of the region. Starting with the installation of solar (photovoltaic) power stations in mountain communities which lacked any electric power, the project has grown to more than 50 systems installed in eighteen villages for lights, vaccine fridges, transceiver radios, nebulizers, laptops for medical clinics, schools, town halls, water purification, aquaculture systems and more.

Problem of the week...

We received a solution to last week's problem. The solver is a great-great granddaughter of famed mathematician Georg Frobenius (1849-1917). We can divulge no more. Here is this week's problem:*

Joe, Butch and Matilda have a free throw contest. Whoever makes the first free throw is the winner. Being the youngest, Joe, who only makes 40% of his baskets, gets the first shot. Butch, who makes 60% of his baskets, then shoots, followed by Matilda, who makes 70% of her baskets. If all three players miss, Joe shoots again and they continue until someone wins.

What is the probability that Joe wins the game?
What is the probability that Butch wins the game?
What is the probability that Matilda wins the game?

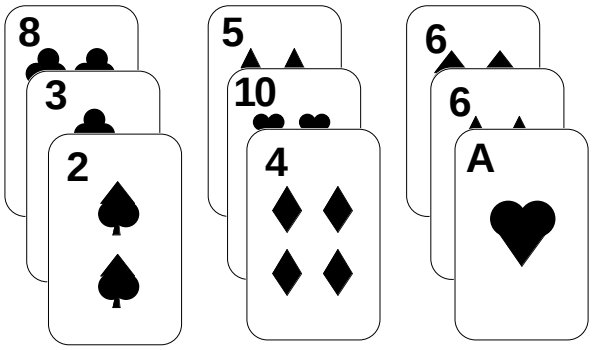
Send solutions to the editor at kaminsky@ augsburg.edu, or slip them under his door at Science Hall 137E.

*reproduced with permission from Bradley University's 'potw' page <bradley.bradlye.edu/~delgado/>

Puzzle of the week...

Diane Glorvigen and **Katie Medd** submitted solutions to the puzzle of volume 19.1. We received solutions to the puzzle of volume 19.2 from **Paul Bjorkstrand**, **Diane Glorvigen**, **William Helm**, **Caleb Jeffers**, **Katie Medd**, and **Jonathan Pierpont**. And here you have this week's puzzle:

Exchange one card from each of the piles to form three piles with equal sums.



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

Editor.....Ken Kaminsky <kaminsky@augsburg.edu>

Died on this Day...

Jean Picard

Born July 21, 1620 in La Flèche, France, **Jean Picard** studied at the Jesuit college at La Flèche. He worked with Gassendi for some time and helped him with observations of a solar eclipse on August 21, 1645. He received an M.A. from the University of Paris is 1650.

In 1655 Picard became professor of astronomy at the Collège de France in Paris. He became a member of the Académie Royale des Sciences in 1666, just after its foundation, and from this time on devoted himself to working for the Académie.

Picard devised a micrometer to measure the diameters of celestial objects such as the Sun, Moon and planets. In 1667 Picard added a telescope to the quadrant making it much more useful in observations. He greatly increased the accuracy of measurements of the Earth, using Snell's method of triangulation. He measured the length of the arc of the meridian; the measurements appear in *Mesure de la Terre* (1671). This data was used by Newton in his gravitational theory.

In the same year Picard went to Tycho Brahe's observatory at Hven Island in Sweden so that its location could be determined accurately and so Tycho observations could be directly compared with others. In 1673 Picard moved to the Paris Observatory where he collaborated with Cassini, Römer and, slightly later, with La Hire.

Jean Picard

Picard was one of the first to apply scientific methods to the making of maps. He produced a map of the Paris region, then went on to join a project to map France. Among his other skills were hydraulics, a topic on which he wrote but one where he put his skills into practice; he solved the problem of supplying the fountains at Versailles with water.

Picard corresponded with many of the leading scientists of his time including Bartholin, Hevelius, Hudde and Huygens.

Picard died on October 12, 1682 in Paris.

Article by: *J J O'Connor* and *E F Robertson*

Actuarial Job Openings...

Thrivent Financial in Minneapolis is in the initial stages of the hiring process for actuarial students. They are looking for:

* 3 actuarial interns for summer 2006
* 1 full-time, entry-level actuarial assistant starting summer 2006

For position descriptions and applications, go to www.thrivent.com/careers/corporate/index.html and click on 'Current Corporate Positions'. The above openings have ID numbers 4899 & 4901. You can apply directly from the job description. The deadline for applications is December 2nd.

For further information, contact Marcia Vandesteeg:

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Email: marcia.vandesteeg@thrivent.com

Be sure to visit the Center for Service, Work, and Learning for other job postings.

Call for Entrants: Math Fun 2005!

The annual (and always exciting) MAA/NCS Team Competition will be held this year on Saturday, November 12 from 9:00 a. m. to noon and your friendly local math department is looking for participants! To look at past problems and solutions visit http://www.usiouxfalls.edu/academic/maa/contest/ncsteam.htm. Contact Blake Boursaw by October 14 (preferably) if you are interested. Refreshments and rewarding mathematics are promised to all.

Cartoon Corner