



**Twenty-Third Annual**

**Pi Mu Epsilon**

**Regional Undergraduate Math Conference**

**November 7 – 8, 2008**

**Featured Speaker: Eve Torrence**

**Randolph-Macon College**

**This program is an MAA NSF-RUMC sponsored activity, funded by  
NSF grant DMS-0536991**

## Eve Torrence

Eve Torrence earned her PhD in Mathematics in 1991 from the University of Virginia. She was a Clare Bothe Luce professor at Trinity College in Washington D.C. from 1991 to 1994 before joining the faculty at Randolph-Macon College. Her current research interests include the mathematics of Charles Dodgson, origami, and elementary mathematics education. Eve and her husband Bruce Torrence have just published the second edition of their book, "The Student's Introduction to *Mathematica*". Eve and her colleague Adrian Rice were awarded the 2007 MAA Trevor Evans award for their article *Lewis Carroll's Condensation Method for Evaluating Determinants*, in Math Horizons, November, 2006. She served as the Chair of the Maryland-DC-Virginia section of the MAA from 2005 to 2007. Eve is currently the President-Elect of PME.

The St. Norbert College chapter of Pi Mu Epsilon and the Sigma Nu Delta Math Club are happy to present Eve Torrence as our featured speaker.

### Abstracts of talks:

#### Modular Origami and the Dodecahedron

In this workshop, we will learn how to build beautiful polyhedra using modular origami. We will also see how tools from graph theory can be used to construct nicely colored models and how combinatorics can reveal properties of these solids. Materials and take home instructions will be provided for all participants. No knowledge of origami or advanced mathematics is required.

#### The Lost Art of Condensation

Charles Dodgson, aka Lewis Carroll, is best known as the famous author of *Alice in Wonderland*. But despite his fame, Dodgson never gave up his day job as a mathematics lecturer at Oxford University. Dodgson was as original in his mathematics as he was in his literary pursuits. We will explore a little known method for computing determinants discovered by Dodgson and trace the history of the mathematics behind this method.

### Again this year:

#### Face Off! The Mathematics Game Show

What is it? Face Off is a mathematics quiz show with questions from the broad realm of mathematics. And we mean broad! Teams of 2-4 students representing their schools compete to answer these questions. For more information, visit the Face Off website.

[http://www.uwosh.edu/faculty\\_staff/szydliks/faceoff.htm](http://www.uwosh.edu/faculty_staff/szydliks/faceoff.htm)

Face Off Organizers: Dr. Ken Price ( [pricek@uwosh.edu](mailto:pricek@uwosh.edu), (920)424-1057),  
Dr. Steve Szydlik ( [szydliks@uwosh.edu](mailto:szydliks@uwosh.edu), (920)424-7346)

Please contact one of the **Face Off** organizers if you would like to enter a team. Any (undergraduate) student who has taken or is enrolled in Calculus I is eligible to join a Face Off team representing their school. If a school doesn't have enough interested students, contact the organizers anyway – we can combine interested students to form hybrid teams. Space will be limited, so form a team soon and let us know of your interest!

## TENTATIVE SCHEDULE

FRIDAY, NOVEMBER 7, 2008

5:00 p.m. Cookies and Registration in Cofrin Hall

5:30 p.m. Student Talks

7:30 p.m. **Eve Torrence** "Modular Origami and the Dodecahedron"

8:30 p.m. Face Off! The Mathematics Game Show

Pizza Social to follow immediately.

SATURDAY, NOVEMBER 8, 2008

8:30 a.m. Conference Registration and Continental Breakfast in Cofrin Hall

9:00 a.m. Student Talks

11:00 a.m. **Eve Torrence** "The Lost Art of Condensation"

This conference is free and open to anyone interested in undergraduate mathematics. Any full-time student who has not yet earned a master's degree is welcome to give a student talk.

## ACCOMMODATIONS

Kress Inn St. Norbert College campus -- across the street from Cofrin Hall  
(A block of rooms is being held at a rate of \$69.95 until at least October 7. Mention the math conference.)

(800)221-5070 (920)403-5100

|                      |                               |                |
|----------------------|-------------------------------|----------------|
| Sleep Inn            | 1600 Lawrence Dr., De Pere    | (920) 338-8800 |
| Comfort Inn          | 2841 Ramada Way, Green Bay    | (920) 498-2060 |
| Country Inn & Suites | 2945 Allied St., Green Bay    | (920) 336-6600 |
| Exel Inn             | 2870 Ramada Way, Green Bay    | (920) 499-3599 |
| Fairfield Inn        | 2850 S. Oneida St., Green Bay | (920) 497-1010 |
| James Street Inn     | 201 James St., De Pere        | (920) 337-0111 |

St. Norbert College has received a \$2000 grant from the MAA and the NSF for the purpose of enhancing our undergraduate research conference in mathematics. Some of this **MONEY** will be used to **support** the **travel** of undergraduate student speakers from schools other than SNC.

Student speakers (through their faculty sponsors) will receive 20 cents per mile for the round-trip travel to SNC (up to a total of 800 miles per school). There is a limit of one mileage grant per school. If there is money left at the application deadline (November 3) the unallocated money will be used to increase the mileage amount up to 40 cents per mile or where the \$1000 runs out, whichever comes first. For the housing allowance, we will reimburse up to \$60 per room for up to 2 rooms per school and no more than the number of speakers from that school.

All travel money will be set aside in the order in which student speakers pre-register.

All travel support will be paid (through the MAA) after the conference. Please save relevant receipts!

In order to apply for travel support, please sign the form near the bottom of the next page or submit the form via e-mail..

**PRE-REGISTRATION FORM**

School Affiliation \_\_\_\_\_

Contact Person \_\_\_\_\_

Address \_\_\_\_\_

Phone Number \_\_\_\_\_

\_\_\_\_\_

E-Mail \_\_\_\_\_

Attending:

| Name  | Housing?* | Gender | Fri/Sat/Both | Pizza? | Speaking? |
|-------|-----------|--------|--------------|--------|-----------|
| _____ | _____     | _____  | _____        | _____  | _____     |
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\*Students from schools not receiving travel funds will be able to stay overnight in an SNC dorm. Please bring sleeping bags and pillows – you might be sleeping on the floor!

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Name of Speaker: \_\_\_\_\_

Title of Talk: \_\_\_\_\_

Length of Talk (check one):  15 minutes (preferred)  30 minutes (if necessary)

Time Preference (check one):  Friday night  Saturday morning  No preference

Brief Abstract:

Special Audio/Visual Needs:

Our institution is applying for **travel support**: \_\_\_\_\_ (Signature of Faculty Sponsor)

(See previous page for more information.)

Duplicate this form as necessary and mail to:

Rick PossMathematics

(or, preferably, respond by e-mail)

St. Norbert College

100 Grant Street

De Pere, WI 54115

**DEADLINE:** November 3, 2008, at 3:00 De Pere time!

Any questions? Contact: Rick Poss (920) 403-3198; FAX: (920) 403-4098; e-mail: [rick.poss@snc.edu](mailto:rick.poss@snc.edu)