



**Twenty-Sixth Annual**

**Pi Mu Epsilon**

**Regional Undergraduate Math Conference**

**November 11-12, 2011**

**Featured Speaker: John Koker**

**University of Wisconsin-Oshkosh**

**Funding for this conference is provided by NSF grant DMS-0846477 through the MAA Regional Undergraduate Conferences program, [www.maa.org/RUMC](http://www.maa.org/RUMC).**

Please contact John Frohlinger at [john.frohlinger@snc.edu](mailto:john.frohlinger@snc.edu) for more information.

## John Koker

John Koker is the Dean of the College of Letters and Science at the University of Wisconsin-Oshkosh. He earned a B.A. from St. Norbert College. He received an M.S. in Mathematics from Purdue University in 1986 and a Ph.D. in Mathematics from the University of Wisconsin-Milwaukee in 1990. He joined the UW-Oshkosh mathematics faculty in 1991. He was promoted to associate professor in 1997 and to professor in 2002. Since 2006, he has served as the university's Dean of the College of Letters and Science.

John's research interests include theory of rings and modules, graph theory, and mathematics education. He has authored several publications and presented many talks. John has a special gift and passion for teaching. He has authored or co-authored grants, worth over \$300,000, targeted at enhancing mathematics education in the upper elementary and middle school grades. His emphasis on problem solving is reflected in his own words: "I want my students to have the opportunity to be 'stuck', understand that the state of being 'stuck' is a natural and honorable place to spend time during the problem solving process, and examine and apply methods to become 'unstuck'." His teaching methods are effective and well recognized. He has received two of the highest awards at UW-Oshkosh: the UW-Oshkosh Distinguished Teaching Award in 2002, and the John McNaughton Rosebush Professorship for Excellence in Teaching in 2004. In 2006 he was awarded the Board of Regents Teaching Excellence Award, the highest recognition for teaching in the University of Wisconsin system.

### Mathematical Reflections

I will share some memories and thoughts about some of the mathematicians and mathematics I have encountered since my time as a student in St. Norbert College in the early 1980's. This reflective talk will include the statements, the solutions (hopefully), and some generalizations of a few the problems with which I have been confronted as a student, teacher and mathematician. These problems allowed me the opportunity to experience being stuck, understand that the state of being stuck is a natural and honorable place to spend time during the problem solving process, and examine and apply methods to become unstuck while being inspired and supported by my teachers and colleagues.

### Events of Sequence

Well-known and familiar sequences of integers, such as the Fibonacci, Catalan and Bell numbers often appear in interesting and sometimes unexpected places. During this talk we will discuss, among other topics, 2-player games, poetry writing and the associative property that will lead to the appearance of sequences of integers. An understanding of some basic mathematics can guarantee victory in a number of 2-player games.

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 11, 2011

- 5:00 p.m. Cookies and Registration in Cofrin Hall  
5:30 p.m. Student Talks
- 7:30 p.m. **John Koker** “Mathematical Reflections”
- 8:30 p.m. Face Off! The Mathematics Game Show

Pizza Social to follow immediately.

SATURDAY, NOVEMBER 12, 2011

- 8:30 a.m. Conference Registration and Continental Breakfast in Cofrin Hall  
9:00 a.m. Student Talks
- 11:00 a.m. **John Koker** “Events of Sequence”

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	SNC campus--across the street from Cofrin Hall A block of rooms at the Kress Inn is being held at \$72 each until at least October 14. Mention the math conference!	(800) 221-5070 or (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 \$2,500 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 typically a limit of one mileage grant per school. If there is money left at the application deadline (November 7) the unallocated money will be used to increase the mileage amount. For the housing allowance, we will reimburse up to \$70 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.

**Please encourage your students to speak. The more student speakers we have this year, the more likely we are to receive funding again next year.**

**PRE-REGISTRATION FORM**

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

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

Address \_\_\_\_\_

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

\_\_\_\_\_

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

Name	Attending:				
	Housing?*	Gender	Fri/Sat/Both	Pizza?	Speaking?
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

\*A limited number of students from schools not receiving lodging support will be able to stay overnight in an SNC dorm. Please bring sleeping bags and pillows – you might be sleeping on the floor!

We welcome student presentations on any topic and any undergraduate mathematics level. Sources could include: class projects, interesting solutions to problems, REU results, senior projects, or anything else that might appeal to undergraduate math students.

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:

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:

John Frohlinger

(or, preferably, respond by e-mail)

St. Norbert College

100 Grant Street

De Pere, WI 54115

**DEADLINE:** November 7, 2011, at 3:00 De Pere time (Central time)!

Any questions? Contact: John Frohlinger (920) 403-1339; FAX: (920) 403-4098; e-mail: [john.frohlinger@snc.edu](mailto:john.frohlinger@snc.edu)