



**Annual Meeting of the Pacific Northwest Section of
the Mathematical Association of America
Friday and Saturday, April 13 and 14, 2007**

Linfield College in McMinnville, OR.

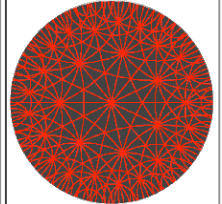


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Some of the publications by the key note speakers can be found at A K Peters (20% discount until May 31)

Note: This discount is good for all books in the catalog.

You must enter the code "MAA" at the end of the order process.

Community College Panel

- ✚ Resources suggested during the [Community Colleges](#) Panel.
- ✚ Panelist - [Paul Casillas](#), Information about Clark College & Professor Casillas
- ✚ Panelist - [Mike Kenyon](#), Information about Green River Community College & Professor Kenyon

The [banquet](#) was held Saturday April 14 at the [Evergreen Aviation Museum](#).

Keynote Speakers:

John Conway, Princeton University

[Elwyn Berlekamp, UC Berkeley](#)[David Wolfe, Gustavus Adolphus College](#)**Tentative Schedule:****Thursday April 12****Evening:** Project NExT DinnerFor more info, please visit <http://www.math.umt.edu/pnwnext/>**Friday April 13****Morning:**7:45 am Packet pickup for Project NExT [[Riley](#) 201]8:00-2:30 Project NExT meeting [[Riley](#) 201]For more info, please visit <http://www.math.umt.edu/pnwnext/>**Afternoon:** Minicourses. - [Taylor Hall\(7\)](#)

2:45 - 5:45 p.m.

- + "[A Tour of Combinatorial Games](#)," (Tour of Combinatorial Games may run longer)
- Course Closed (Full)
 - Elwyn Berlekamp, UC Berkeley, and David Wolfe, Gustavus Adolphus College
<http://www.gustavus.edu/~wolfe/games2003/index-pnw.html> [[Taylor](#) 101-Combinatorics]
- + "[An Approach to Population and Biological Modeling for Pre and Post Calculus Students](#)," **Cost \$20.**
 - Sharon Brown and Chris Dugaw, Humboldt State University Department of Mathematics [[Taylor](#) 201-Math Bio]

Evening:

6:00 pm Project NExT dinner [Golden Valley Brewery]

For more info, please visit <http://www.math.umt.edu/pnwnext/>

6:45 pm Packet pickup [[Melrose Hall\(1\)](#)]

7:00 pm Student Reception [Johnasson in [Melrose Hall\(1\)](#)]

8:00 Public lecture by John Conway [Ice Auditorium in [Melrose Hall\(1\)](#)]

 **The Free Will Theorem:**

This proves that if, as most of us believe, there exist experimenters having a certain amount of free will, then elementary particles must already enjoy their own small share of this valuable commodity. The theorem was proved jointly with Simon Kochen.

9:00 Reception - [Johnasson in [Melrose Hall\(1\)](#)]

Special Reception honoring Students.


All meeting participants are invited to a special reception preceding the Conway lecture.

This reception is to honor student attendees, many of whom are first-time meeting participants.

Food and beverages will be available (students first!).

Saturday April 14

All day:

 Section Meeting

Meeting activities will take place in [Graf Hall \(5\), Murdock Hall\(6\), Melrose Hall \(1\), and Taylor Hall \(7\)](#)

7:30- 8:30 am Executive meeting [West Wing in Dillon]

8:00 am Packet pickup [Murdock Atrium]

8:00- 5:15 Book Sales [Murdock Atrium]

9:00 am Welcome, Invited Lecture

Elwyn Berlekamp - [Fibonacci Plays Billiards](#) [Ice Auditorium in Melrose]

10:15-12:10 Contributed talks

12:15-1:45 Lunch, Student problem solving session, Community College Panel [Melrose]

🌐 Resources for [Community Colleges](#) Panel.

1:00-1:45 Business meeting [Melrose]

2:00 pm Invited lecture

David Wolfe - [In Tribute to Martin Gardner](#) [Ice Auditorium]

3:15-5:10 Contributed talks

Evening:

Banquet at [Evergreen Aviation Museum](#)

Keynote speaker: John Conway

5:30 pm Social hour at Evergreen Aviation Museum

6:30 Dinner

7:15 Section awards

7:45 Invited lecture- Conway

Infinite and Infinitesimal Numbers and Games.

Cantor's infinite cardinal numbers are well-known to most mathematicians - his infinite ordinal numbers less so. I shall discuss both types before passing to the larger system of partizan games and surreal numbers that simultaneously generalize both the ordinal and real numbers.

🌐 Plenary talks by

- 🌐 John Conway - Keynote speaker, Evening Banquet
- 🌐 Elwyn Berlekamp - [Fibonacci Plays Billiards](#)
- 🌐 David Wolfe - [In Tribute to Martin Gardner](#)

Abstract:

In this talk, I will discuss at least two fun elementary problems:

First, in how many ways can you place stones on an m by n grid so that each square is adjacent to an odd number of stones? For example, on a 7 by 5 grid there are exactly two ways:

```

..*..   *...*
*.***   *.*.*
**.**.*   .***.
*...*   *...*
.***.   **.*.
*...*   *.*.*
*...*   ..*..

```

(Joint work with Erick Knight, St Peter High School)

For the second problem, it's long been observed (by Dr. Matrix, among others) that if you multiply the number 123456789 by 2, 4, 5, 7, or 8 that the result permutes all 9 digits:

```

123456789 x 2 = 246913578
123456789 x 4 = 493827156
123456789 x 5 = 617283945
123456789 x 7 = 864197523
123456789 x 8 = 987654312

```

I will address why this is the case by generalizing the problem to base b numbers with $b-1$ digits.

 [Contributed paper sessions.](#)

 Resources for [Community Colleges](#) Panel.

Registration Information



Regular registration: \$35
Student registration: \$10
Student speaker registration: \$0
 Registration includes [lunch](#) on Saturday.

[REGISTRATION FORM](#) (Word Document)

[REGISTRATION FORM](#) (PDF version)

Registration will be in [Murdock Hall\(6\)](#)

Note:

-  There is a \$10 surcharge for non-MAA members. (Does not apply to students.)
-  **Registration questions can be sent to Jennifer Nordstrom at jfirkins@linfield.edu**

Banquet: \$35

Student banquet: \$20

Guest banquet: \$40

Banquet included admission to the Evergreen Aviation Museum.

Meals

Meal information:

Lunch Saturday will be a sandwich bar. It will include vegetarian options.

The banquet is a buffet. All items will be available to all guests. However, in order to ensure that there is enough food we are requesting that people indicate "Standard" or "Vegetarian" based on whether they will be eating the meat entrees or not.

Banquet Menu:

Carved Natural Country Beef Eye of Round with Rosemary Au Jus and Whipped Cream Horseradish

Roast Turkey Breast with Cranberry Orange Relish

Steamed Fresh Spring Vegetables

Chive and Blue Cheese Crusted Whipped Potatoes

Assorted Rolls and Butter

Tofu Lo Mien with Bok Choy, Waterchestnuts, Bamboo Shoots, Carrots, and Peppers.

Tossed Green Salad with Grape Tomatoes, Mushrooms, and Carrots

Assorted Mini Cakes

Assorted Mini Nanaimo Bars

Assorted Mini Tarts

Students are strongly encouraged to attend this meeting and we ask faculty to bring students, including those who might be ready to give a talk at a future meeting.

We would especially like to encourage student presentations on summer research, REUs, senior projects, the modeling contest, and other projects.

Work presented need not be original research.

Titles and abstracts can be submitted as with other contributed papers; there will be a session for student papers.

Colin Starr, Willamette University, is the primary contact for the contributed papers. The deadline for contributed papers is February 28th. If you would like to organize a special session, please e-mail the program chairs (below) with the appropriate information

Hotel Information: We have conference rates at two local hotels -

Note: Conference rates are only good if booked before March 12, 2007:

Red Lion Inn and Suites (a couple of miles from campus, but close to Evergreen Aviation Museum)

Phone: 503-472-1500, Please mention you are with PNW MAA

Best Western Vineyard Inn (about 5 blocks from campus)

Phone: 503-472-4900 or 1-800-285-6242, Please mention you are with PNW MAA

There are also several nice Bed and Breakfasts in the area:

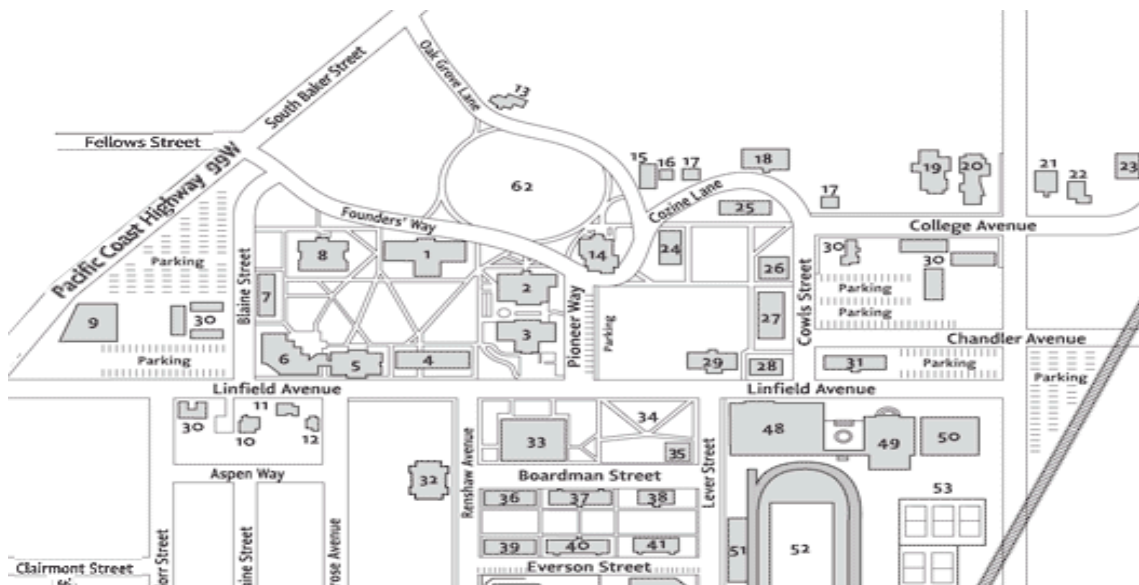
<http://www.oregonwineinns.com/>

Driving Directions to Linfield:

<http://www.linfield.edu/admission/visit/directions.php>

Parking Information and Building Locations

Parking is free on campus. You can park in any of the lots. If you have trouble finding a parking space, there is always plenty of space in the lots near Keck Circle at the south end of campus. See <http://www.linfield.edu/admission/visit/map.php> for a campus map.



- ✦ Meeting activities will take place in
 - ✦ Graf Hall (5),
 - ✦ Murdock Hall (6),
 - ✦ Melrose Hall (1), and
 - ✦ Taylor Hall (7).
 (Numbers refer to locations on the campus map).
- ✦ Registration will be in Murdock



- Hall (6).
- + Friday Evening Lecture and reception will be in Melrose Hall (1).
- + Project NExT activities and NExT registration will be in the Riley Campus Center (2).
- + Minicourses will be in Taylor Hall (7).

Jennifer Firkins Nordstrom, jfirkins@linfield.edu - Local Arrangements Chair

Colin Starr, cstarr@willamette.edu - Program Chair— Contributed papers and general program

Nancy Ann Neudauer, nancy@pacificu.edu - Program Chair— Invited speakers

Last revised on
2007-04-20: CM