



Biomedical and Physical Sciences (BPS) Building, MSU

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# Ohio Section of the APS Spring Meeting April 11-12, 2003

Michigan State University  
East Lansing, Michigan 48824

Theme:

## Ohio-Michigan Physics Conference on Quantum Computing

**Call for Contributed Papers - Abstracts Due March 21**

Meeting Web Page Information: <http://www.pa.msu.edu/ohio/>  
Meeting Email Account: [ohio@pa.msu.edu](mailto:ohio@pa.msu.edu)

**Organizing Committee:** Dr. Wolfgang Bauer, MSU (chair)  
Dr. Rene Bellwied, Wayne State University  
Dr. Robert Brown, Case Western Reserve University  
Dr. Joe Finck, Central Michigan University  
Dr. Brage Golding, MSU  
Dr. Michael Harrison, MSU  
Dr. Catherine Mader, Hope College  
Dr. Vladimir Zelevinsky, MSU

## MEETING SCHEDULE

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### Friday April 11

12:00 - 4:30	Registration (Kellogg Center Auditorium Lobby)
1:50 - 2:00	Welcome (Kellogg Center Auditorium)
	<b>Session A: Invited Papers (Kellogg Center Auditorium)</b>
2:00 - 3:00	Quantum Computing with Individual Atoms <b>Dr. Chris Monroe</b> , University of Michigan
3:00 - 3:30	Break
3:30 - 4:30	TBA <b>Dr. Bruce Kane</b> , University of Maryland
4:30 - 5:00	APS Section Announcements
5:30 - 6:30	Poster Session (Kellogg Center Big Ten Room)
6:30 - 7:00	Social Hour (Kellogg Center Big Ten Room)
7:00 - 8:00	Banquet (Kellogg Center Big Ten Room)
	<b>Session B: After Dinner Lecture (Kellogg Center Big Ten Room)</b>
8:00 - 9:00	Digital Life and Evolution <b>Dr. Richard Lenski</b> , MSU

### Saturday April 12

7:30 AM	Registration and Continental Breakfast (BPS Building)
	<b>Session C: Contributed Papers and Town Meeting</b>
8:00 - 9:50	Contributed Papers in parallel sessions
	<b>Session D: Invited Papers (1410, BPS)</b>
10:00 - 11:00	Exponential Algorithmic Speedup by Quantum Walk <b>Dr. Edward Farhi</b> , MIT
11:00 - 12:00	Quantum Computing with Electron on a Helium Film <b>Dr. Arnold Dahm</b> , Case Western Reserve University
12:00 - 12:15	Closing Remarks

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## ABSTRACT INFORMATION

Contributed papers dealing with all areas of physics education and original research are solicited from both APS and AAPT members, for both Oral and Poster sessions. Complete abstract submission instructions can be found at <http://www.aps.org/meet/OSS03/abs.html>. We strongly urge you to proof your abstract before submission. Contributors may submit abstracts now in **only one** way: via the web. Email submissions are no longer accepted by the APS.

*Submitting abstracts via the web:* to submit a contributed abstract using the online web submission process, an author needs to know two things: (1) the number and ordering of the authors and collaborations; and (2) abstract content. The web page will guide you through the rest. Follow the directions online to create your own practice abstract. Select the meeting (2003 Ohio Section Spring) by clicking on the appropriate button. A form will be created for you. Simply input the information, including your APS member number. (You may want to try a test submission before submitting your abstract. To do this, log onto <http://abstracts.aps.org> and select the meeting TEST.)

**The deadline for the receipt of all submitted abstracts is March 21, 2003 by 5:00 PM EST at APS headquarters.**

## REGISTRATION AND BANQUET INFORMATION

- The registration for meeting and the banquet is due **March 21, 2003**.
- The conference registration fee is \$35 for members of APS or affiliated societies who register by March 21, 2003. A fee of \$5 is assessed for late registration.
- Although there is no registration fee charged to students, *they are asked to fill out a registration form*.
- The cost of the banquet is \$33 for nonstudents and \$15 for students. **Banquet reservations must be made by March 21 as well.**
- **Return the registration with payment to Lorie Neuman, Department of Physics and Astronomy, 3215 Biomedical Physical Sciences, Michigan State University, East Lansing, MI 48824-2320.**

## HOUSING



Overnight accommodations are available at the Kellogg Center Hotel. The negotiated room rate for this meeting is \$84 (single or double occupancy). Room rates do not include tax. In order to get the quoted rate you may need to mention that you are attending the OS/APS meeting.

Other possible housing choices within short driving distance are listed at:

**[http://www.ctrlr.msu.edu/travel/msu\\_hotel.htm](http://www.ctrlr.msu.edu/travel/msu_hotel.htm)**

## DIRECTIONS

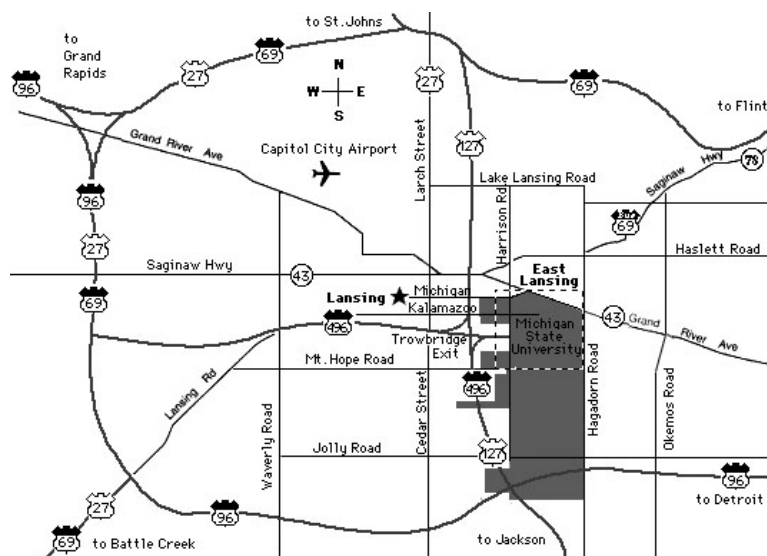
A detailed map of the campus and how to get there is on the Michigan State University web site: **<http://www.msu.edu/dig/msumap/>**. General directions to the campus are below.

**Parking:** The Kellogg Center has its own parking garage attached. Parking is free for hotel guests.

**From Capitol City Airport:** Turn right onto Grand River Avenue West (.4 miles) to Waverly Road; turn left South (3.4 miles) to I-496; turn left East (5 miles) to Trowbridge Road (exit 9) East (.5 miles) to Harrison Road; turn left North approximately 1 mile on the right (four traffic lights up).

**From South-East (Ann Arbor, Toledo, Columbus):** I-23 North to I-96 West, to US-127 (exit 106) North (3.1 miles) to Trowbridge Road exit East (.5 miles) to Harrison Road; turn left North approximately 1 mile on the right (four traffic lights up).

**From South (Indianapolis, Fort Wayne):** North on I-69 to I-496 East; East (5 miles) to Trowbridge Road (exit 9) East (.5 miles) to Harrison Road; turn left North approximately 1 mile on the right (four traffic lights up).



**From South-West (Kalamazoo, Battle Creek, Chicago):** I-94 East to I-69 North, to I-496 East; East (5 miles) to Trowbridge Road (exit 9) East (.5 miles) to Harrison Road; turn left North approximately 1 mile on the right (four traffic lights up).

**From East (Detroit):** I-96 West to US-127 (exit 106) North (3.1 miles) to Trowbridge Road exit East (.5 miles) to Harrison Road; turn left North approximately 1 mile on the right (four traffic lights up).

**From North:** South on US-127 to Trowbridge Road exit East (.5 miles) to Harrison Road; turn left North approximately 1 mile on the right (four traffic lights up).

## OSAPS LEADERSHIP AND SERVICE: 2002-2003

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ex. 4560

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517-353-8662 *bauer@pa.msu.edu*

Ohio Section Spring Meeting  
Ohio-Michigan Meeting on Quantum Computing  
April 11-12, 2003  
Michigan State University

**REGISTRATION FORM**

Deadline for receipt of this form is **March 21, 2003**

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Name: \_\_\_\_\_  
Affiliation: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
E-mail: \_\_\_\_\_

**PLEASE CIRCLE ALL THAT APPLY**

Status: Faculty    Student    Industry    Government    Other: \_\_\_\_\_  
Membership: APS    OS/APS    AAPT    SOS/AAPT    Other: \_\_\_\_\_

Registration only (Member): **\$35** \$ \_\_\_\_\_  
Registration only (Nonmember): **\$55** \$ \_\_\_\_\_  
Registration only (Student or Retired Member): **\$0** \$ \_\_\_\_\_  
Registration; Saturday only; K-12 Teachers: **\$10** \$ \_\_\_\_\_  
Banquet Tickets (Nonstudent)\* **\$33** \$ \_\_\_\_\_  
Banquet Tickets (Student)\* **\$15** \$ \_\_\_\_\_  
Circle One:    Steak&Salmon    Vegetarian  
Abstract fee for publication in Bulletin of the APS\*\*: **\$40** \$ \_\_\_\_\_

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TOTAL PAYMENT ENCLOSED\*\*\*: \$ \_\_\_\_\_

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Do you intend to contribute a paper? Yes \_\_\_\_\_ No \_\_\_\_\_

**Note:** Deadline for receipt of abstracts is **March 21, 2003**. Indicate oral or poster session on abstract form.  
(See instructions for abstract submission at <http://www.aps.org/meet/abstracts/meet-abstract.html>).

**PLEASE MAKE CHECKS PAYABLE TO: Michigan State University - OS/APS**

**PLEASE SEND THIS REGISTRATION FORM WITH PAYMENT TO:**

Lorie Neuman  
Department of Physics and Astronomy  
3215 Biomedical Physical Sciences  
Michigan State University  
East Lansing, MI 48824-2320

Notes:    \* Banquet reservations must be made absolutely no later than March 21, 2003.  
          \*\* Abstract fee is not required to contribute a paper.  
          \*\*\* A payment receipt will be included in your registration packet.