



# SIGMA XI Newsletter Iowa State University March 2010 Calendar Spring 2010

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## Initiation Banquet

Thursday, April 29, 2010      Scheman Continuing Education Building  
5:30 p.m., Social Hour      6:20 p.m., Dinner, Initiation  
Zaffarano Prize    Karas Award    Lester Earls Award

8:00 p.m., Retiring President's Address

Professor Steven Kawaler  
Physics & Astronomy  
Iowa State University

### One Astronomer's View of Why We Must do Astronomy from Space

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The above gives details of the highlight of our year, the Annual Initiation Banquet. All events will take place in the same rooms of the Scheman Building. See later in this Newsletter for details on Banquet costs and reservation procedures

### One Astronomer's View of Why We Must do Astronomy from Space

*Prior to the 20th Century, nearly everything we learned about our Universe was rooted in Earth-based study and observation from terra firma. Recognizing the fact that our atmosphere hampers the view of space, by the end of the last Century, astronomers had eagerly embraced observations from mountaintops, balloons, aircraft, and spacecraft. In the first few years of the 21st Century, it has become clear that "space is the place" as permanent astronomical observatories are providing undistorted views of the universe from radio through gamma-ray wavelengths.*

*Ultrasharp images from the Hubble Space Telescope, and views of the previously invisible Universe from Spitzer, Chandra, Fermi, and other smaller missions are indeed dazzling, but observations with other spacecraft provide another advantage - an uninterrupted view of phenomena for months or years at a time. The Kepler spacecraft is doing just that - enabling us to, for the first time, look for Earthlike planets around other stars. The same data can also be used to study "starquakes" and use them to obtain our first nearly-direct views of the insides of stars through the newly reborn field of "asteroseismology."*

*Having spent much of my research time in the past two decades working with large networks of ground-based telescopes to try to obtain 24/7 coverage of stars, the move to space-based observations has been an exciting change. In this talk, I'll explain why space is, indeed, the best place to go for asteroseismic data, and show how Kepler data from its first year of operation has produced some stunning new results.*

**Committee Members** for 2010-11, as elected via the ballot on page 3 of this Newsletter, will be introduced at the Banquet. Steve Kawaler will step down as President and Steve Martin will assume the office of President. Diane Birt has agreed to become President Elect (and, thus, will also serve as Program Chairperson) for 2010-11. Steve Kawaler and P. Jeffrey Berger will be retiring from the Executive Committee; and Fredric Janzen has resigned. Thus, in this election we will elect three new members to the Executive Committee as the ballot indicates. In addition, we will be electing two members to the Membership Committee to replace retiring members Jeanne Stewart and Patricia Thiel; and a new three-member Nominating Committee is elected each year. The ballot strives to retain a balance among disciplines on the various committees.

**Banquet Details:** Initiates are guests of the Chapter; for all others, cost is \$30.00 per person. The dinner entrée is a turkey or chicken dish, with a vegetarian entrée as an alternative, if requested with the reservation.

The last page of this Newsletter has a reservation form, with a deadline for receipt of reservations of Monday noon, April 26 (please return reservations sooner, if at all possible).

Last minute reservations or changes can be made by phone to Harry Weiss (294-5666, 296-5051). Checks, made out to **Sigma Xi**, should be sent to Harry Weiss, Aero Engr Department, 1200 Howe Hall, ISU, before the Banquet.

**Golden Anniversary Members:** Each year we recognize and invite as our guests to the Banquet, those who have been active members of Sigma Xi for 50 years. This year, we have ten Golden Anniversary Members: Milton Allison, Lloyd Anderson, Thomas Fenton, Laurent Hodges, David Hoffman, Kenneth Larson, Duane Mangold, Frederick Parrish, Alvin Read and Thomas Wheelock.

We will also be pleased to welcome other previously recognized Golden Anniversary Members to the Banquet.

**Annual Meeting:** The 2009 Sigma Xi Annual Meeting was held in Houston, TX on November 13-15, 2009. It included a well attended and highly successful Student Research Conference, at which delegates served as judges. Award recipients: Proctor Prize – Deborah Jin, National Institute of Standards & Technology; McGovern Award – David Michaels, George Washington University; Chubb Award – Timothy Phillips, Texas A&M University; Young Investigator Award – Brandt Eichman, Vanderbilt University.

**Dues Structure:** Each year the dues structure of the Society is evaluated based on a formula tied to the Higher Education Price Index (HEPI), which is comparable to but not the same as the Consumer Price Index (CPI). Based on this formula, delegates at the 2008 Annual Meeting approved the following dues structure for 2009-10: Dues for new (and continuing) Full and Associate Members (non full-time students) are \$95.00; full-time student dues are \$25.00; initiation fee is \$15.00; promotion fee is \$25.00. At the 2009 Annual Meeting, the delegates voted to continue the 2009-10 dues structure for the succeeding year, 2010-11. In addition to National dues, the local Chapter has local dues of \$11.00. However, as is customary, local dues are waived for initiates and those being promoted. And, of course, each initiate/promotee is invited as a guest of the Chapter at the Initiation Banquet.

**Headquarters Address:** For inquiries to the National Office, use the following address:  
Sigma Xi  
3106 East N.C. Highway 54  
Research Triangle Park, NC 27709

**ELECTION BALLOT**  
**Iowa State University, Sigma Xi**  
**Spring, 2010**

**Executive Committee**

*One for 2010-2012 term*

*Two for 2010-2013 term*

**Vote for Three**

- \_\_\_\_\_ Sue W. Fairbanks, – NREM
- \_\_\_\_\_ Victor S.-Y. Lin, – Chemistry
- \_\_\_\_\_ Chris Minion – Veterinary Medicine
- \_\_\_\_\_ David White – CCE Engineering
- \_\_\_\_\_ Kyoung-Jin Yoon – Veterinary Medicine

**Membership Committee**

*2010- 2013 terms*

**Vote for Two**

- \_\_\_\_\_ Cinzia Cervato – Geo/Atmospheric Sciences
- \_\_\_\_\_ Emily Heaton - Agronomy
- \_\_\_\_\_ Thomas Sauer – Soil Tilth Laboratory
- \_\_\_\_\_ Curtis Struck – Physics & Astronomy

**Nominating Committee**

*One year terms*

**Vote for Three**

- \_\_\_\_\_ Jay-Lin Jane – Food Science & Human Nutrition
- \_\_\_\_\_ John Lajoie – Physics & astronomy
- \_\_\_\_\_ Thomas Jurik – EEOB-LAS
- \_\_\_\_\_ Kirk Moloney – EEOB-LAS
- \_\_\_\_\_ Charles Schwab – Agricultural/Biosystems Engr

**Please return this ballot by Monday, April 12, 2010, if at all possible.**

Return to  
**H. J. Weiss,**  
**Aerospace Engineering,**  
**1200 Howe Hall**  
**Iowa State University**  
**Ames, IA 50011-2271.**

Page may be folded and stapled or taped for mailing through campus mail.

## OFFICERS OF THE CHAPTER (2009-2010)

President	Steven Kawaler
President Elect	Steve Martin
Secretary-Treasurer	Harry J. Weiss

### Executive Committee

Harry J. Weiss	1992-10
Steven Kawaler	2007-10
P. Jeffrey Berger	2007-10
Harry Horner	2008-11
Steve Martin	2008-11
Diane Birt	2009-12
Fredric Janzen	2009-12
William Simpkins	2009-10

### Committee On Membership

Jeanne Stewart	2007-10
Patricia Thiel	2007-10
Mark Gleason	2008-11
Carol Vleck	2008-11
Amy Bix	2009-12
Nick Christians	2009-12

### Nominating Committee

(elected yearly)

Bonnie Bowen  
Rolf Koford  
Curtis Struck

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**SIGMA XI BANQUET**, Thursday, April 29, 2010, rooms 220-230 Scheman Building

Name \_\_\_\_\_ No. of tickets \_\_\_\_\_

Address \_\_\_\_\_

**Cost:** Initiates are guests of the Chapter. The cost to others is **\$30.00 per ticket**. Initiates who made guest reservations with their acceptance and who have paid for a guest (or guests) should not return this form. If you prefer a vegetarian rather than a chicken/turkey entree, please so indicate.

Vegetarian? \_\_\_\_\_ Signature \_\_\_\_\_

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Please use the above form to make reservations for the Sigma Xi Initiation Banquet. The deadline for receipt of reservations is Monday noon, April 26. Tickets will be mailed, or they can be picked up at the Banquet. Reservations which might not make it in the mail and late cancellations can be made by phone, 294-5666 (Aero Engr Department) or 296-5051 (leave a message, if necessary). A check, made out to **Sigma Xi**, should be enclosed with the reservation form, and both sent to

**H. J. Weiss, Sigma Xi  
Aerospace Engineering  
1200 Howe Hall  
Iowa State University  
Ames, IA 50011-2271**