March 2008 GIMS Newsletter

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GIMS Special Events

Keithley Award Session

Bjorn Wannberg
Gammadata Scienta AB

The Award Session is Wednesday, March 12, 2008 2:30PM - 5:30PM

Session S4: Keithley Award Symposium
Morial Convention Center - 206

"For advances in the development of angle-resolved electron analyzers for photoelectron spectroscopy."

The award winner will give a talk followed by 3 other presenters on related topics.

GIMS Business Meeting
Tuesday, March 11
5:45 p.m. - 6:45 p.m.
Convention Center
Room 228

All GIMS members welcome!

Dinner to follow at the Marriott New Orleans in the Creole Queen Room

(Across the street from the convention center)

GIMS Student Travel Grants

Jason Randel, Stanford University

Utku Kemiktarak, Boston University
Focus Sessions at March Meeting

Special Thanks to the organizers of the GIMS focus sessions for 2008. Additional thanks to the focus session chairs for their time and effort.

Mar 10 2008 8:00AM, Monday

Session A36  **Focus Session: X-ray and Electron Optics and Microscopy**  Sponsor: GIMS  
Chair:  *Timothy Graber, University of Chicago*  Room:  *Morial Convention Center 228*  
Invited Speakers:  *Wenbing Yun*

Mar 10 2008 11:15AM, Monday

Session B36  **Focus Session: Advances in Scanned Probe Microscopy I: Low Temperatures**  Sponsor: GIMS  
Chair:  *Joseph A. Stroscio, National Institute of Standards and Technology*  Room:  *Morial Convention Center 228*  
Invited Speakers:  *Jens Wiebe*

Mar 11 2008 8:00AM, Tuesday

Session H36  **Focus Session: Advances in Scanned Probe Microscopy II: Force Methods**  Sponsor: GIMS  
Chair:  *Andreas Heinrich, IBM*  Room:  *Morial Convention Center 228*  
Invited Speakers:  *Hans J. Hug*

Mar 12 2008 8:00AM, Wednesday

Session P36  **Focus Session: X-ray and Neutron Instrumentation and Science**  Sponsor: GIMS  
Chair:  *George Srajer, Argonne National Laboratory*  Room:  *Morial Convention Center 228*  
Invited Speakers:  *Douglas Abernathy*

Mar 12 2008 11:15AM, Wednesday

Session Q36  **Focus Session: Advances in Scanned Probe Microscopy III: Force Methods**  Sponsor: GIMS  
Chair:  *Eric Hudson, IBM*  Room:  *Morial Convention Center 228*  
Invited Speakers:  *U.D. Schwarz*

GIMS March APS Meeting Session Schedule

View the complete GIMS sponsored March meeting schedule, speaker list, and abstracts at:  
[http://flux.aps.org/meetings/YR08/MAR08/Unit_MAR08_GIMS.pdf](http://flux.aps.org/meetings/YR08/MAR08/Unit_MAR08_GIMS.pdf)

The general information for GIMS sponsored sessions:

Mar 11 2008 5:45PM, Tuesday

Session M36  **GIMS Business Meeting**  Sponsor: GIMS  Room:  *Morial Convention Center 228*

Mar 12 2008 2:30PM, Wednesday
Session S4 Keithley Award Symposium  Sponsor: GIMS Chair: James Matey, Sarnoff Corporation Room: Morial Convention Center 206
Invited Speakers: Bjorn Wannberg, J.C. Campuzano, Dan Dessau, Zhi-Xun Shen

Mar 13 2008 8:00AM, Thursday

Session U36 Nanoinstrumentation for Biological and Other Applications  Sponsor: GIMS Chair: Robert Guertin, Tufts University Room: Morial Convention Center 228

Mar 13 2008 11:15AM, Thursday

Session V2 Facilities for Meeting Grand Challenges  Sponsor: DCMP GIMS Chair: Gwyn Williams, Thomas Jefferson Laboratory National Accelerator Facility Room: Morial Convention Center LaLouisiane C
Invited Speakers: George Neil, Jerome Hastings, Wendy Flavell, J. Singleton

Session V36 Advances in Scanned Probe Microscopy IV: Optical and High Frequency Methods  Sponsor: GIMS Chair: Phillip First, Georgia Institute of Technology Room: Morial Convention Center 228

Mar 14 2008 8:00AM, Friday

Session X36 Advances in Instrumentation and Measurements  Sponsor: GIMS Chair: Charles Agosta, Clark University Room: Morial Convention Center 228

2008 Joseph F. Keithley Award For Advances in Measurement Science Recipient

Bjorn Wannberg
Gammadata Scienta AB

Citation:

"For advances in the development of angle-resolved electron analyzers for photoelectron spectroscopy."

Background:

Bjorn Wannberg received his B.Sc. at Uppsala University in 1963 and his Ph.D. degree at the same university in 1972, with a thesis titled “Particle Optics with applications in Atomic Beam Spectroscopy”. He was then recruited by later Nobel Laureate Kai Siegbahn to work on the electron optical aspects of photoelectron spectrometers. Besides the instrumentation work, he took an active part in the VUV spectroscopy of small molecules in gas phase, and in particular measurements of angular distributions.

Wannberg became engaged in the start of the Scienta company (now VG Scienta AB) in the mid-1980s, with the aim to commercialize the spectrometer development, especially for XPS (ESCA) applications. Between 1987 and 1996 he shared his time between the research at the university
and the development work for Scienta. During this time, he invented a novel way to operate a hemispherical electron energy analyzer in order to collect the energy distributions for a large number of emission directions in parallel. The successive improvement of this so called “angular mode” has been one of his main tasks ever since.

From 1996 to 2000 he worked full time for Scienta, in the role as the company’s specialist in electron optics. Since 2000, he has been working as a consultant in particle optics, although with strong ties to VG Scienta. He is still active in the development of new instruments for angle-resolved photoelectron spectroscopy.

Selection Committee:

Art Hebard (Chair), K. Waldrip, V. Zapf, K.D. Irwin, J. Matey, A. Macrander

The Award Session is Wednesday, March 12, 2008 2:30PM - 5:30PM

Session S4: Keithley Award Symposium
Morial Convention Center – 206

Keithley Award Session Speaker List

2:30PM - 3:06PM
S4.00001: Keithly Award Talk: Pushing the limits in ARPES
Invited Speaker: Bjorn Wannberg

3:06PM - 3:42PM
S4.00002:
Invited Speaker: J. C. Campuzano

3:42PM - 4:18PM
S4.00003: High Resolution Angle-Resolved Photoemission Studies of Correlated Electron Systems
Invited Speaker: Dan Dessau

4:18PM - 4:54PM
S4.00004: Angle-Resolved Photoemission Study of High Temperature Superconductors
Invited Speaker: Zhi-xun Shen

2008 GIMS Fellows

- Albert Macrander
- Kent Irwin
- George Gillies

2007 GIMS Leadership

A special thank you to all who volunteered time and effort this year including our 2007 Officers
Chair
Carolyn A MacDonald
University at Albany, SUNY

Secretary-Treasurer
Chris Armstrong
Keithley Instruments

Chair Elect
Charles Agosta
Clark Univ

Vice-Chair
Tim Graber
Univ of Chicago

Past & Nominating Comm. Chair
Karen E. Waldrip, Ph.D.
Sandia National Labs

Fellowship Committee Chair
Charles Agosta
Clark University

Executive Committee

Joseph Stroscio
NIST

Tim Graber
University of Chicago

Adam Daire
Honeywell

Rachael Heron
Janis Corp.

George Srajer
Argonne National Lab

Eric Hudson
MIT

Albert T. Macrander (Ex Officio)
Editor, Review of Scientific Instruments
Argonne National Laboratory

Keithley Award Committee

Art Hebard
(Chair)

K. Waldrip

K.D. Irwin
(2007 Award Winner)

J. Matey

Albert T. Macrander

Vivien Zapf

Best wishes to our newly elected 2008 Officers

2008 GIMS Leadership

Chair
Charles Agosta
Clark Univ

Secretary-Treasurer
Albert Macrander

Chair Elect
Tim Graber
Univ of Chicago

Vice-Chair
Joseph Stroscio
NIST

Past & Nominating Comm. Chair
Carolyn A MacDonald
University at Albany, SUNY

Fellowship Committee Chair
Tim Graber
University of Chicago
Executive Committee

Daniel Rugar
Andreas Heinrich
George Gillies

Tim Graber
Keith Schwab
Eric Hudson

Albert T. Macrander (Ex Officio)
Editor, Review of Scientific Instruments
Argonne National Laboratory

Secretary-Treasurer Report

GIMS finances

Available funds as of 12/31/07: $73,691