

2017 GMAG Business Meeting Minutes, APS March Meeting, New Orleans

Location: Ernest N. Morial Convention Center, Session J50, Room 397, March 14, 2017, 5:45pm – 6:45pm

GMAG Exec Comm Attendance:

Chair: Suzanne te Velthuis

Chair Elect: Chris Leighton

Vice Chair: Stephen Hill

Past Chair: Jonathan Sun

Secretary/Treasurer: Tiffany Santos

Members-at-Large: Ilya Krivorotov, Peter Fischer, Christian Binek

Guest Incoming Exec Comm Members: Elke Arenholz, Yumi Ijiri, Eric Fullerton

Absent: Jonathan Friedman, John Cumings, David Lederman

Meeting started at 6:05pm.

Secretary/Treasurer report by Tiffany Santos

2016 Meeting Minutes

The minutes of the 2016 Business meeting can be found online for GMAG members to view: <http://www.aps.org/units/gmag/governance/minutes/upload/march16.pdf>

Election Results

The 2016 Election was on schedule and ran December 23 – February 3. GMAG had 1112 members at that time and 21.0% of the membership voted. Eric Fullerton was elected as Vice Chair. Yumi Ijiri was elected as Secretary/Treasurer. Elke Arenholz and June Lau were elected as Members-at-Large. Their terms begin at the close of the Business Meeting.

Thanks to all candidates for their willingness to serve. Thanks to the Nominating Committee for putting together a diverse slate of candidates: Ilya Krivorotov (Chair), Peter Fischer (GMAG Exec Comm member), Julie Grollier (GMAG member) and Roland Kawakami (Council appointed member).

Thanks to the outgoing Executive Committee members for their dedicated service: Jonathan Sun (Past Chair), Tiffany Santos (Secretary/Treasurer), John Cumings and Jonathan Friedman (Members-at-Large).

2016 GMAG Bylaws Vote

John Cumings presented the proposed changes to the GMAG Bylaws at the Business Meeting last year. The Bylaws vote ran from April 11 – May 6. The revised Bylaws were approved by vote of the membership and went into effect on May 6.

Membership status

GMAG had 1092 members as of January 11. That is an increase from 979 members one year ago. 547 members are students. GMAG had 455 student members last year. APS total membership is 54,029. During the March Meeting 2016 membership drive, we got 24 new names for the 1-year free membership. Note that unit dues have increased from \$8 to \$10.

Financial Statements

This report includes financial statements through 12/31/2016 and thus does not include cost of March Meeting activities in 2017. The net assets for 2016 are \$70,114.68. Revenue of \$19,434.15 came from Membership dues + GMAG's share of the March Meeting + investment income. Total expenses in 2016 were \$19,067.39. Net revenue was \$366.76. The Exec Comm voted to fund one outreach grant for \$5,000 in 2016, but the check has not been paid out yet. Thus no funds went toward outreach grants in 2016. A new expense for 2016 was the \$2,605.72 for the GMAG jobs mixer reception at the March meeting in Baltimore.

Status of the Outreach Grants

The workshop entitled "Stimulation of Human Brain Using Magnetic Fields" at Iowa State University, proposed by Ravi Hadimani, was funded in 2015 and took place in early April 2016. The workshop was attended by 50 middle school students from Boone Middle School and consisted of demonstrations and presentations with 3D animation. The *Ames Tribune* wrote an article on the workshop: <http://www.amestrib.com/news/event-isu-inspires-local-kids-pursue-stem-disciplines>.

For 2016, the Exec Comm voted to fund an outreach proposal submitted by Prof. Enrique Del Barco at the Univ. of Central Florida, in the amount of \$5,000, for a summer camp called Physics Youth Scholastic and Instructing Camp for Orlando Scientists (PhySICOS). It is a week-long summer camp for 40 high school students in the surrounding counties. It is being organized by graduate students, in collaboration with similar chemistry and biology camps at UCF, and will take place in June 2017. PhySICOS website: <http://sciences.ucf.edu/physics/physicos/>

Call for Outreach Proposals: Outreach grants for up to \$5000 are available. Applications are accepted anytime by the GMAG Chair Chris Leighton and will be considered by the Exec Comm. You can find more details on the Call for Outreach Proposals in the Newsletter and on the GMAG website: <http://www.aps.org/units/gmag/outreach/index.cfm>.

The Best Student Presentation Award Sponsorship

This award sponsorship took place at the MMM Conference in New Orleans, November 2016: \$1000 for the winner + \$250 for each of 5 finalists, \$2250 total. GMAG membership was required by all applicants. The winner was Jamileh Beik Mohammadi from the Univ. of Alabama, for the presentation entitled "Micromagnetic Investigations of Higher Order Anisotropy in Ultra-Thin Films with Fluctuating Perpendicular Anisotropy."

Program Report from Chair Elect Chris Leighton

Stats summary:

- 930 abstracts placed out of 935 submitted to Category #10 Magnetism
- This is 10% of the Meeting total, 9600 abstracts. (10% in 2016)
- 85 total GMAG sessions: 72 focus sessions, 2 regular, 10 symposia, 1 prize; 11 additional co-sponsored
- 8 Focus Topics sponsored/co-sponsored: 51 invited talks, 72 focus sessions
- For the 10 symposia: 5 sponsored and 5 co-sponsored

GMAG was allotted 5 invited symposia, and nominations were solicited from the GMAG membership. 13 nominations were received, and the symposia were selected by vote of the Exec Comm. There was a competition for the 5 symposia slots, and very good nominations were not selected.

GMAG has a total of 10 symposia: 5 sponsored and 5 co-sponsored. There is the “n-1” rule: the number of invited talks for a Focus Topic is equal to the number of sessions for that Focus Topic in the previous year minus 1.

Additional GMAG Activities:

- Prof. Kate Ross (Colorado State Univ.) was awarded the APS George E. Valley Jr. Prize, which is an annual \$20,000 prize awarded to an early career physicist who has made an outstanding contribution. Prof. Ross will deliver a talk in the DMP/GMAG Awards Session C19, “Quantum Frustrated Magnetism and its Expression in the Ground State Selection of Pyrochlore Magnets”.
- GMAG is sponsoring 5 tables at the APS Student Lunch with the Experts. Thanks to Christian Binek, Peter Fischer, Steve Hill, Jonathan Sun and Suzanne te Velthuis for being the experts at the lunch.

Thanks to the 19-member sorting team consisting of 9 Focus Topic organizers, 8 local volunteers and 2 GMAG Execs for putting together the GMAG sessions at the APS Sorters Meeting in December.

Chris asks for new Focus Topic ideas:

- Laura Lewis’ suggestion: Biomedicine & magnetism
- Axel Hoffman’s suggestion: Spin textures (in general) including domain walls, which will take some abstracts away from 10.1.4 (spin transport & magnetization dynamics)

Report from Vice Chair Stephen Hill

Fellowship Committee Report

The deadline for nominations was June 1, 2016. Out of the 17 nominations received, 15 were considered. The Fellowship Committee consisted of Steve Hill (Chair), John Cumings, Jonathan Friedman, Ilya Krivorotov, David Lederman, Peter Fischer, and Christian Binek. After individual ranking, email discussion and a short conference call, 5 nominations were forwarded to the APS General Fellowship Committee. All 5 were elected by APS. Diversity stats: 40% of nomination pool was female; 60% of our selections were female; 15% of GMAG membership is female.

The 2016 GMAG sponsored APS fellows are:

Laura Heyderman, ETH Zurich - Paul Scherrer Institute

Citation: *For important contributions to the study of mesoscopic magnetic systems, with the observation of monopole-like excitations, thermally active behavior, and phase transitions in arrays of coupled frustrated magnets; and the control of magnetism at the nanoscale in hybrid systems.*

Laura H. Lewis, Northeastern University, USA

Citation: *For investigations of fundamental structure-property relationships in functional magnetic materials from a unified perspective, specifically for advancing permanent magnet, magnetic cooling, and biomedical applications.*

Maria Varela, Universidad Complutense de Madrid, Spain

Citation: *For pioneering contributions to the physics of complex oxides through electron energy loss spectroscopy.*

Xixiang Zhang, KAUST, Saudi Arabia

Citation: *For innovative contributions to macroscopic quantum tunneling of magnetization and resonant spin tunneling in magnetic molecules, and the discovery of materials with large magnetocaloric effects for room temperature magnetic cooling.*

Igor Zutic, State University of New York – Buffalo, USA

Citation: *For pioneering contributions to the theory of spin-dependent transport, magnetism in semiconductor nanostructures, and novel spintronic devices.*

Laura Lewis and Igor Zutic are present to receive their certificates.

In 2016, the APS Council instituted a new method for calculating the number of Fellows that can be elected in each unit. The new method, which is being phased in, excludes student members in the calculation:

- For 2016/17, #Fellows = $0.005 \times (\#Unit\ Members - \frac{1}{2} \# Students) = 4^*$
- From 2018, #Fellows = $0.005 \times (\#Unit\ Members - \# Students) = 3^*$
- No alternates or matching alternates!
- Nominees should be an APS member on Jan. 1 of the preceding year.

*Based on current unit membership: 1092 members, 547 students

Refer to: <http://www.aps.org/programs/honors/fellowships/allocations.cfm>.

After some confusion, GMAG was given an alternate this year, but there will be no alternate allowed next year.

Question: Why this change? APS Fellowship committee felt that there were too many Fellows and it was becoming less exclusive.

Discussion including Andy Kent and Mark Stiles: For every international nominee, you get a matching alternate that does not have to be international.

Nominations are due on June 1, 2017. There is a new nomination system for 2017. Refer to: <http://www.aps.org/programs/honors/fellowships/nominations.cfm>
<https://aps-fellowship.fluidreview.com>

GMAG leadership will coordinate to make sure correct nominations are carried forward this year. Much work remains to be done with regard to diversity: only 9% of GMAG member Fellows are female, and only 7 female Fellows have been sponsored by GMAG.

Student Travel Awards

Steve received 29 applications (30 in 2015). They were ranked via email by the Exec Comm. Twelve awards were given out this year, \$250 each. All winners should be present at the Business Meeting to receive their award, and they have also provided service to GMAG and APS by helping out at the GMAG membership table and/or Contact Congress Booth. There was good participation from the awardees in these activities. Steve reads the students' names and they come to the front to receive their checks and certificates.

The 12 Student Travel Awardees are:

Milos Baljovic, Paul Scherrer Institute, Switzerland

Benedetta Flebus, Utrecht University, Netherlands

Adam Goad, University of Maryland, Baltimore County, USA

Isaiah Gray, Cornell University, USA
Alannah Hallas, McMaster University, Canada
Alexander Hristov, Stanford University, USA
Amanda Huon, Drexel University, USA
Alex Kane, University of California, Davis, USA
Anirban Kundu, University of Arizona, USA
Pavel Maksimov, University of California, Irvine, USA
Carola Purser, Ohio State University, USA
Chi Tang, University of California, Riverside, USA

Report from Chair Suzanne te Velthuis

Outstanding Dissertation in Magnetism Award

The winner was selected by vote of the Exec Comm. Suzanne presented the winner with his award on Monday in session B47. The 2017 Outstanding Dissertation in Magnetism Award winner is Kai Chen, Univ. of Arizona, thesis title: "Spin Transport in Magnetic Nanostructures."

Formal Requests for Funding/Endorsement

The Exec Comm has decided to:

- Sponsor the Best Student Presentation Awards at the 2017 MMM in Pittsburgh (\$2250)
- Sponsor Poster Prizes at the ICM 2018 (\$2000). This is the first time in 30 years that the ICM will be in the US.
- Support the International Research Travel Award Program (IRTAP), \$1000/yr. This program provides travel for someone from a developing country to go to a developed country to conduct research. The Exec Comm will determine going forward if it sees the benefit and wants to continue support.
- Endorse the "23rd Soft Magnetic Materials Conference (SMM)" in Sevilla in September 2017

New webpages on the GMAG website

Suzanne shows the new pages:

Awards: <http://www.aps.org/units/gmag/awards/index.cfm>

Outreach: <http://www.aps.org/units/gmag/outreach/index.cfm>

Other Business

None.

Meeting adjourned at 6:47pm.

Respectfully submitted,
Tiffany Santos
GMAG Secretary/Treasurer