

**2019 Business Meeting  
of the APS Topical Group on Shock Compression of Condensed Matter**

June 19, 2019, 12:30 PM, Hilton Portland Downtown Hotel, Portland, Oregon  
(held in conjunction with the 2019 APS Shock Compression Conference)

Reported by Secretary/Treasurer, Matt Lane. Meeting slides for this meeting have been archived.

***Agenda:***

1. Welcome (Germann)
2. Election Report (Lane)
3. Financial Report (Lane)
4. Proposed Bylaws Amendments (Lane)
5. APS publications: Physical Review Research (Thoennessen)
6. SCCM19 Conference Report (Wixom)
7. SCCM21 Conference Announcement (Jordan)
8. Membership & Fellowship (Jordan)
9. Student & Early Career Symposium (Brown)
10. Early Career Award (Moore/Bolme)
11. Diversity & Inclusion Luncheon (Stekovic)
12. International Engagements (Zocher)
13. Our role in the APS March Meetings: March 2020 focus session(s) & beyond (Oleynik)
14. Revisiting the GSCCM charter (Oleynik)
15. Open Floor (all)

***1. Welcome (Germann)***

The meeting was called to order by Topical Group Chair, Tim Germann, at 12:30pm. The list of attendees is included at Appendix A. There were 44 attendees.

***2. Election Report (Lane)***

The Secretary/Treasurer reported that the election for 2019 leadership was significantly delayed. The online vote was conducted with directvote.com from February 13 to March 19, 2019. 112 ballots were cast out of 355 eligible (31.5% of membership voted). The candidates and winner (in bold) are listed below:

- Vice-Chair, (1-year term with succeeding posts in chair line)
  - Malcolm Burns
  - **Ivan Oleynik**
- Secretary/Treasurer, (3-year term)
  - Daniel Hooks
  - David Jones
  - **J. Matthew Lane**
  - Christopher “Kit” Neel
- Executive Committee, Member-at-large (2-year term, 2 seats available)
  - **Minta Akin**
  - **Saryu Fensin**
  - Matthew Kroonblawd

- Fady M. Najjar

#### Current Topical Group Officers

Chair: Timothy Germann (1/19 – 12/19) Los Alamos National Laboratory  
 Chair-Elect: Jennifer Jordan (1/19 - 12/19) Los Alamos National Laboratory  
 Vice-Chair: Ivan Oleynik (1/19 - 12/19) University of South Florida  
 Secr./Treas.: J Matthew Lane (1/19 - 12/21) Sandia National Laboratories  
 Executive Committee, Members-at-Large:  
   Darcie Farrow (1/18 - 12/19) Sandia National Laboratories  
   Cyril Williams (1/18 - 12/19) U.S. Army Research Lab  
   Minta Akin (1/19 - 12/20) Lawrence Livermore National Laboratory  
   Saryu Fensin (1/19 - 12/20) Los Alamos National Laboratory  
 Council Rep: Brad Marston, Div. Condensed Matter Physics  
 Past Chair: Brian Jensen (1/19 – 12/19) Los Alamos National Laboratory

### ***3. Financial Report (Lane)***

Total assets as of 12/31/2018 were \$448,100, down \$400 from the previous year-end balance. The topical group took in \$14,800, mainly in membership dues. We spent \$15,200. Both expenses and income were modest, as is typical in off-conference years. Year-end membership was 355, down from 473 at the end of 2017, and 373 at the end of 2016. Our two-year cyclic membership numbers associated with our biennial conference continue to be worrisome.

### ***4. Proposed Bylaws Amendments (Lane)***

Topical group Secretary, Matt Lane, outlined a GSCCM Executive Committee proposal for four amendments to the topical group bylaws. Slides containing draft language are included in Appendix B. Suggestions and feedback on these changes will be incorporated before continuing with the formal process for approval and ratification.

### ***5. APS publications: Physical Review Research (Thoennesen)***

APS Editor-in-chief, Michael Thoennesen introduced a new (one-week old) open source journal titled Physical Review Research, which covers all areas of physics. The introduction of this new journal coincides with the 125<sup>th</sup> anniversary of the Physical Review journals, the 90<sup>th</sup> anniversary of Reviews in Modern Physics, and the 60<sup>th</sup> anniversary of Physical Review Letters.

### ***6. SCCM19 Conference Report (Wixom)***

2019 Conference Co-chair, Ryan Wixom, gave a report on the Portland meeting. The meeting accepted more abstracts (667 total) and registered more attendees (633 total) than past conferences. The conference co-chairs had decided early on that the meeting would not aim to make a profit, and the conference is on track to break even financially. Ryan noted that expenses were higher than in the past due to the use of APS Meetings. The chairs plan to write-up their many lessons learned and pass these forward to the 2021 chairs. Ryan particularly highlighted the strong student participation at the meeting.

### ***7. SCCM21 Conference Announcement (Jordan)***

2021 Conference Co-chair, Jennifer Jordan, presented an update on the planning for the 22<sup>nd</sup> biennial SCCM meeting. The location is still being finalized due to unexpected issues with space planning and cost. Governments per-diem rates are extremely difficult to secure in many markets. A location

announcement should be possible in the coming months, with an East Coast, or Central location likely. APS Meeting will be used to organize the logistics so that the chairs can focus on the technical program.

#### ***8. Membership & Fellowship (Jordan)***

GSCCM Chair-elect, Jennifer Jordan, gave a brief report on membership and fellowships. The topical group was allocated only a single fellowship in 2019 due to lackluster membership numbers. This is the first time in recent memory that the topical group had fewer than two fellowships to award.

#### ***9. Student & Early Career Symposium (Brown)***

Chair of the Student and Early Career Symposium, Katie Brown, presented her report on the success of the pre-conference event. Students presented 22 oral talks and 23 posters on the Sunday before the SCCM Conference. These numbers were down slightly from the 2017 meeting. The slight drop in participation was perhaps due to abstract submission confusion with the APS abstract system.

The topical group waived registration fees for 59 student and post-doc participants, and provided 40 \$350 student travel grants, and 8 \$499 grants to overseas students. Overall expenditure for student engagement was approximately \$50,000 for the Portland meeting.

#### ***10. Early Career Award (Moore/Bolme)***

David Moore and Cindy Bolme presented a proposal to establish a society-level endowed award for early career researchers in shock compression science. Since 2012, the topical group has offered a unit-level award with a \$1000 prize and registration waiver. A society-level award would raise both the prestige of the award and the prize amount to \$3000. However, a society-level award is required by the APS to be endowed in the amount of \$45,000. A significant fund-raising effort will be necessary to move forward, since there are limitations on the use of topical group funds. The consensus of the group was that this was an important investment in the future of our community.

#### ***11. Diversity & Inclusion Luncheon (Stekovic)***

Lana Stekovic reported on this year's diversity and inclusion luncheon. The turnout was great. Lana suggested that we could do even better with increased focus and planning.

#### ***12. International Engagements (Zocher)***

Tony Zocher reported on topical group international advising and coordination. The objective of the program is to facilitate international participation in topical group conferences, with language assistance, and visa sponsorship. The effort, in place since 2003, grew steadily until 2013, and has declined each meeting since. At its peak, 142 visa requests were shepherded, but that number has dropped to 27 in 2019. Only 3 visas were requested from Russia, 17 from China and 7 others in 2019. The drop in international participation is alarming.

#### ***13. Our role in the APS March Meetings: March 2020 focus session(s) & beyond (Oleynik)***

GSCCM Vice-Chair, Ivan Oleynik, summarized the recent focus sessions "Materials in Extremes: Bridging Simulation and Experiment" at APS March meetings. In non-biennial conference years, the topical group sponsors sessions and is active at the March Meeting. However, in biennial meeting years, our engagement drops dramatically. This year, GSCCM did not sponsor any March Meeting sessions and was not involved in March Meeting sorting or planning. Ivan has suggested that we request a permanent

membership on the March Meeting Technical Organizing Committee. This representation would ensure that the topical group is engaged with March Meeting sorting meetings.

#### ***14. Revisiting the GSCCM charter (Oleynik)***

Ivan Oleynik led a provocative discussion on the prospect of broadening the focus of our topical group beyond the traditional topic of shock compression. It was suggested that broadening our focus would help bring in new people and better connect with students. Engaging with the new area of data science, for instance, might allow growth opportunities for the topical group. This rethinking of our charter could involve a renaming which broadly engages the science of matter in extreme conditions.

The proposal spurred an energetic discussion about the boundaries and overlap with other groups. It was suggested that broadening to high-pressure quasistatic and ramp science might be appropriate, but that there are already active communities in plasma. While this discussion was open to a change in scope for the topical group, there was some stated reluctance to changing the name of the group.

#### ***Appendix A: Meeting attendees who signed the attendance list (44 total)***

<b>First Name</b>	<b>Last Name</b>	<b>Institution</b>
Minta	Akin	Lawrence Livermore National Lab
Bill	Anderson	Los Alamos National Lab
Michael	Armstrong	Lawrence Livermore National Lab
Brian	Barnes	U.S. Army Research Lab
Matt	Beason	Los Alamos National Lab
Cindy	Bolme	Los Alamos National Lab
Neil	Bourne	Univ of Manchester
Eric	Brown	Los Alamos National Lab
Katie	Brown	Los Alamos National Lab
Stephanie	Brygoo	CEA
Tod	Caldwell	DOE / NNSA
Federica	Coppari	Lawrence Livermore National Lab
Erik	Davis	UC Davis
Richard	Dick	n/a
Jon	Eggert	Lawrence Livermore National Lab
Bernardo	Farfan	Sandia National Labs
Saryu	Fensin	Los Alamos National Lab
Dawn	Flicker	Sandia National Labs
Tim	Germann	Los Alamos National Lab
Dan	Hooks	Los Alamos National Lab
Jennifer	Jordan	Los Alamos National Lab
Mukul	Kumar	Lawrence Livermore National Lab
Matt	Lane	Sandia National Labs
Marius	Millot	Lawrence Livermore National Lab
Kier	Nguyen	Univ of South Florida
Ivan	Oleynik	Univ. of South Florida
Sikhanda	Satopathy	U.S. Army Research Lab

Brian	Schuster	U.S. Army Research Lab
Steven F.	Son	Purdue Univ.
Christian	Sorensen	Purdue Univ.
Dylan	Spaulding	UC Davis
Svetlana	Stekovic	Univ of Illinois Urbana-Campaign
Sarah	Stewart	UC Davis
Mary Ann	Sweeney	Sandia National Labs
Naresh	Thadhani	Georgia Tech
Michael	Thoennessen	American Physical Society
Scott	Turnage	U.S. Army Research Lab
Leah	Tuttle	Sandia National Labs
Justin	Wilkerson	Texas A&M Univ.
Ashley	Williams	Univ of South Florida
Cyril	Williams	U.S. Army Research Lab
Jonathan	Willman	Univ of South Florida
Cole	Yarrington	Sandia National Labs
Marvin	Zocher	Los Alamos National Lab

*Appendix B: Proposed bylaw changes*

## Proposed Bylaw Amendment #1

### ARTICLE V – EXECUTIVE COMMITTEE

- Governance.** The Topical Group shall be governed by an Executive Committee, which shall have general charge of the affairs of the Topical Group.
- Composition.** The Executive Committee shall consist of the Officers of the Topical Group, the most recent Past Chair, and four Members-at-Large elected to staggered two-year terms, and a Early Career Member-at-Large position reserved for a member who is a graduate student, or within two years of their graduation, at the time of the election.
- Executive Committee Meetings.** The Executive Committee shall meet at least once each year. Any member of the Executive Committee unable to attend a meeting may name a nonvoting alternate to represent him or her, subject to the approval of the Chair. The Chair of the Topical Group shall preside over the Executive Committee meetings. A majority of the voting members, including at least two Officers, shall constitute a quorum.

### ARTICLE VII – ELECTION AND TENURE OF THE OFFICERS AND EXECUTIVE COMMITTEE MEMBER

- Terms of Office.** The terms of office of the Officers and Members-at-Large of the Executive Committee shall begin on the first day of January following their election. The Secretary-Treasurer shall serve for a term of three years and may not serve more than two consecutive terms. The tenure of a Member-at-Large of the Executive Committee shall be two years. The Student Member-at-Large shall also serve a two year term. No Officer or Member-at-Large shall be eligible for the same office in the same year following his or her term of office, with the exception of the Secretary-Treasurer.

## Proposed Bylaw Amendment #2

### ARTICLE VIII – APPOINTED COMMITTEES

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**5. George E. Duvall Shock Compression Science Award Committee.** The Chair of the Topical Group shall appoint a member of the Topical Group to serve as Chair of the George E. Duvall Shock Compression Science Award Committee, and shall include four (4) members appointed by the Chair to a one-year term. The Immediate Past Recipient of the Award shall be invited to be on the committee. If the Immediate Past Recipient declines, the Committee Chair may invite an additional Committee member to keep the total membership at five (5).

**6. Early Career Shock Compression Science Award Committee.** The Chair of the Topical Group shall appoint a member of the Topical Group to serve as Chair of the Early Career Shock Compression Science Award Committee and shall include three (3) members appointed by the Chair to a one-year term.

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## Proposed Bylaw Amendment #3

### ARTICLE IX – MEETINGS

**1. Biennial Topical Group Meeting.** Every two (2) years, in odd numbered years, the Topical Group Meeting will be held at a location approved by the Executive Committee and announced in writing to the general membership no later than one year in advance of the meeting.

a. The registration fee for the Topical Group Meeting shall be fixed after consultation with the Executive Committee. Non-members of the Society shall pay a surcharge to be set each year by the Executive Committee.

b. All contracts must be signed by an Executive Officer of the Society.

c. The Proceedings of the Biennial Topical Group meeting shall be published.

**2. Annual Scientific Meeting.** One meeting of the Topical Group shall be held annually at such time and place as shall be determined by the Executive Committee, subject to the rules and regulations specified in the Society Constitution and Bylaws. Whenever it shall be feasible and not to the disadvantage of the members of the Topical Group, the Executive Committee may order this or any other meeting to be held conjointly with a meeting of the Society.

a. The location of the Annual Scientific Meeting will usually coincide with that of the March Meeting of the Division of Condensed Matter Physics. The location can be changed to another General Meeting of the Society after consideration of the views of the Topical Group members at a prior Business Meeting of the Topical Group.

b. The Chair of the Executive Committee is responsible for naming an organizer to work with the Division of Condensed Matter Physics.

**2. Annual Business Session.** Each year the Topical Group shall hold a Business Session which shall be a session of the Biennial Topical Group Meeting or the Annual Scientific Meeting Regular Meeting. This Business Session shall be open to the general membership of the Topical Group and must be announced in writing at least thirty days in advance of the meeting. It shall be devoted exclusively to the reports of officers and committees, election results, and the transaction of business affairs. No scientific program of the Topical Group shall be presented simultaneously with the Business Session. The Secretary-Treasurer shall notify the Topical Group members of the agenda for the Business Session no later than three weeks prior to the Regular Meeting Business Session.

## Proposed Bylaw Amendment #4

**3. Nomination and Election of the Vice-Chair, Secretary-Treasurer, and Executive Committee Members.** Each year the Nominating Committee shall nominate at least two candidates for the office of Vice-Chair, for Secretary-Treasurer during the final year of the term of the current Secretary-Treasurer, at least three candidates for open positions of Members-at-Large of the Executive Committee, and at least two candidates for the graduate student Member-at-Large position. The Nominating Committee shall notify the Secretary-Treasurer of the results not later than September 15th, except under extraordinary circumstances. All nominations shall be accompanied by written acceptance by, and biographical information for, the nominee. The Secretary-Treasurer shall inform the Topical Group members of the nominations made and shall invite the Topical Group members to suggest candidates in writing for the various offices and Executive Committee positions. If as many as five percent of the total Topical Group membership, as determined on 31 December of the year preceding the election, suggests in writing the same person for the same office, that person shall be deemed to have been nominated. The nominee's written acceptance, biographical information, and letters from five percent of members suggesting this nominee must be in the office of the Secretary-Treasurer by October 15th.

The Secretary-Treasurer shall poll the Topical Group membership by mail and/or electronic ballot not later than November 15th, stating a closing date no earlier than December 6th. Ballots shall be returned to and counted by the Secretary-Treasurer or his or her designate. Election shall be decided by a plurality of those voting. If there is a tie, the Executive Committee shall decide the election, with the Chair voting only in the case of a tie among the other Executive Committee members. The Secretary-Treasurer shall communicate the results of the election to the Chair by December 18th and shall publish the results in a manner designated for official announcements.