



DCMP Newsletter

APS Division of Condensed Matter Physics, DCMP Summer 2018 Newsletter

Important Deadlines and Dates:

DCMP Invited Symposia Nominations	Friday, August 24, 2018
DCMP Executive Committee Nominations	Saturday, September 1, 2018
Voting Starts for DCMP Executive Committee	October 2018
Contributed Abstracts Deadline	November 10, 2018
APS Fellow Nominations	Friday, February 1, 2019
2019 Boston APS March Meeting	March 4 – March 8, 2018

The 2019 APS March Meeting

The 2019 APS March Meeting will be held in Boston, Massachusetts from Monday, March 4 to Friday, March 8, 2019. The 2019 March Meeting headquarters hotel is the Westin Boston Waterfront, and the 2019 March Meeting venue is the Boston Convention and Exhibition Center (BCEC). The complete bulletin will be available only in electronic form.

Message from the DCMP Chair and DCMP Chair-Elect: Invited Symposia Nominations

Please help make the 2019 March Meeting a success by submitting nominations for invited DCMP Symposia. APS has a simplified method of proposing DCMP-sponsored symposia for the March Meeting. Access the site here:

<https://www.aps.org/meetings/march/abstracts/>

Log in and follow the prompts to get to the APS March Meeting 2019 page, at which point you can start your nomination submission process.

A few key points:

---According to DCMP bylaws, invited speakers are drawn exclusively from member nominations. If a researcher is not nominated, then they cannot be selected as an invited speaker, no matter how wonderful their research is. It is therefore vital for DCMP members to submit nominations.

---When you begin entering your symposium nomination into the system, please remember to choose "Invited Symposium Nomination."

---Please recall that DCMP sponsors symposia, not individual speakers, so it is most helpful and constructive if you can propose a complete session including a chair, five speakers, and up to two additional substitute speakers.

---Please inform the people you nominate and make sure that they are willing to give the talk you are suggesting. Similarly, make sure your choice of session chair is willing to serve in this capacity.

---Anyone who gave an invited talk at the 2018 March Meeting is ineligible for an invited talk in 2019 (prizes and other special circumstances excepted). When you first add a proposed invited symposium speaker, you will be able to search for the nominee's name. If you then click on "more info", you will find out, *inter alia*, whether your nominee was an invited speaker in 2018 and hence ineligible for an invited talk in 2019. A full list of 2018 invited speakers is available at <https://www.aps.org/meetings/march/reports/mar18speakers.cfm>

We urge **all members** of DCMP to propose symposia. This is how you directly influence what invited talks you can choose from when you arrive in Boston in March. A complete, well justified symposium proposal leads to the strong symposia and invited talks that we all appreciate and enjoy at the March Meeting.

The deadline for completion and submission of proposals is **Friday, August 24, 2018 at 11:59 PM** (EDT), but we urge you to please consider submitting proposals as early as today, tomorrow, or next week. Please, take the time to submit your ideas and nominations so that we can have as rich and diverse a selection of topics and speakers as possible.

Paul Canfield, DCMP Chair and Daniel Arovas, DCMP Chair Elect

Additional Suggestions for Creating a Successful Proposal

1. Propose a symposium on a timely topic with five excellent talks. The program committee favors symposia with five talks, so suggesting an additional sixth talk can be helpful in the event of cancellations or conflicting nominations.
2. Choose an appropriate title and provide a clear justification. This will aid the committee in making its decision. The speaker can revise the title later, but it is important to have the topic of the presentation stated clearly.
3. Provide an informative abstract for each talk. This will address the central theme of the symposium and aid the committee in reaching a decision. Speakers who are invited will be asked to submit their own abstracts later.
4. Provide references to publications. This will aid the committee in determining whether the work is current and whether it has received acceptance from the scientific community. Electronically posted pre-prints are useful, but do not have the same status as refereed publications.
5. Enter the proposed symposium under a relevant [DCMP](#) sorting category. This will ensure that the correct subcommittee examines the proposal. Multiple submissions of a proposal are counterproductive and ineffective.

Nomination and Election of DCMP Executive Committee Members

This coming October, you will be asked to elect a new Vice Chair (who will become, in successive years, Chair Elect, Chair and Past Chair), a new Secretary/Treasurer, and three Members-at-Large who serve 3-year terms. To submit a nomination for Vice Chair or Member-at-Large, please go to:

<http://www.aps.org/units/dcmp/governance/nominations.cfm>. When considering nominees, you might find it useful to consult the [past list of DCMP chairs and members-at-large](#). The deadline for nominations is **September 1, 2018**.

The DCMP Executive Committee performs several functions. One of its most important responsibilities is to lead the organization of the APS March Meeting. It is the body that selects the division's invited symposia from those nominated by the community. Thus, a proper balance of expertise and diversity of the Executive Committee are essential for a successful meeting. The Executive Committee helps to lobby Congress on science policy issues. Finally, the DCMP Members-at-Large choose potential new Fellows, from those nominated, to be considered by the APS Fellowship Committee and Council. The current membership of the Executive Committee appears at the end of this newsletter and can be found at: <http://www.aps.org/units/dcmp/governance/officers/index.cfm>

The election is planned for **October 2018** (specific opening and closing election dates will be fixed after the nomination slate and candidate materials are finalized). Members will receive voting instructions from the APS. Candidate biographies and statements will be available on both the APS and DCMP web sites before and during the election. During the election, you will be able to go to the [DCMP web-site](#) and click the link that will appear there, or you can click the link in an email that you will receive once the election site opens.

Division of Condensed Matter Physics Graduate Student Travel Awards

The DCMP Graduate Student Travel Awards have been established to assist the professional development and careers of graduate student researchers. We anticipate awarding ten \$500 DCMP Travel Awards and ten Honorable Mention recognitions to allow graduate student members of DCMP to participate in APS March Meeting sessions. The selection will be based on merit and the committee will consist of members of the DCMP Executive Committee.

Students interested in being considered for a DCMP Travel Award must apply online: <https://www.aps.org/units/dcmp/awards/index.cfm>

On-line applications must be completed by November 26, 2018. Advisors of applicants will be asked to complete a letter of support by December 17, 2018.

Richard L. Greene Dissertation Award in Experimental Condensed Matter or Materials Physics

The Richard L. Greene Dissertation Award was established to recognize doctoral thesis research of exceptional quality and importance in experimental condensed matter or experimental materials physics. The award, to be given annually, will consist of \$2500, a certificate citing the contributions made by the recipient, and an allowance of up to \$1500 for travel to attend and give an invited talk at the annual APS March meeting at which the award will be presented. On-line applications must be completed by Friday, August 31, 2018, and the eligibility criteria and nomination information can be found online: <https://www.aps.org/programs/honors/dissertation/greene.cfm>

New DCMP-Sponsored APS Fellows Selected in 2017

Congratulations to DCMP-sponsored APS Fellows selected in 2017. Fellowship certificates and pins were presented to the new DCMP Fellows during the DCMP/DMP Joint Fellowship/Awards Reception at the 2018 APS March Meeting in Los Angeles.

Bachtold, Adrian [2017]

The Institute of Photonic Sciences

Citation: For groundbreaking experiments on quantum electron transport and vibrational dynamics of carbon nanotubes and the development of highly sensitive techniques for nanomechanical mass and force measurements.

Chernyshev, Alexander L [2017]

University of California, Irvine

Citation: For theoretical studies of the dynamical and transport properties of quantum magnets, and for studies of the properties of holes and stripes in lightly doped antiferromagnets.

Fernandes, Rafael M. [2017]

University of Minnesota

Citation: For pioneering works on nematic order and nematic fluctuations in iron-based superconductors and other strongly correlated materials.

Guinea, Francisco [2017]

IMDEA Nanoscience, Madrid (Spain)

Citation: For pioneering theoretical research on the novel properties of graphene.

Gurarie, Victor [2017]

University of Colorado at Boulder

Citation: For contributions to the theories of topological phases, disordered systems, turbulence, and logarithmic operators in conformal field theory.

Herbut, Igor [2017]

Simon Fraser University

Citation: For contributions to the theory of Dirac fermions in strongly correlated electron systems, including the prediction of an antiferromagnetic ground state for graphene in a strong magnetic field.

Hermele, Michael A [2017]

University of Colorado Boulder

Citation: For seminal contributions to the theory of quantum spin liquids and topological quantum matter.

Kim, Kee Hoon [2017]

Seoul National University

Citation: For materials discoveries, and understanding the underlying physics thereof, in the fields of multiferroics (record high magnetoelectric coupling), transparent high mobility oxides for device applications, iron based superconductors, and high magnetic field quantum materials (including URu₂Si₂).

Mostovoy, Maxim [2017]

University of Groningen

Citation: For seminal contributions to the understanding of ferroelectric magnets as well as topological defects in multiferroics.

Mucciolo, Eduardo R [2017]

University of Central Florida

Citation: For sustained contributions to understanding electronic transport in low-dimensional systems, including spin-pumping in quantum dots, disorder effects in graphene and Kondo systems, Berry phase in single-molecule magnets, and correlated noise attacks on quantum error correction.

Murakami, Shuichi [2017]

Tokyo Institute of Technology

Citation: For pioneering work in the theory of spin Hall effect, topological insulators, and topological semimetals, including the prediction of topological materials.

Oreg, Yuval [2017]

Weizmann Institute of Science

Citation: For his many contributions to the science of electronic properties of nanoscale systems, including proposals for the realization of localized Majorana modes in superconductor nanowires with schemes to perform topological manipulations using these wires, and for the realization of two-channel Kondo effect.

Ortiz, Gerardo [2017]

Indiana University

Citation: For wide ranging contributions to theoretical and computational many-body quantum physics including quantum simulation methods, exact methods for quantum lattice models, superconductivity, and entanglement.

Paglione, Johnpierre [2017]

University of Maryland

Citation: For experimental contributions to the understanding of strongly correlated and topological electronic materials through the synthesis and investigation of heavy fermion compounds, unconventional superconductors, and topological materials.

Reznik, Dmitry [2017]

University of Colorado Boulder

Citation: For important contributions to the understanding of electron-lattice interactions in correlated electron systems; in particular, investigations of anomalous phonons in copper oxide superconductors, direct observation of dynamic charge stripe spectra, and insights into charge density wave formation.

Shibauchi, Takasada [2017]

University of Tokyo

Citation: For pioneering measurements of the thermodynamic and transport properties of iron-based superconductors, playing a pivotal role in the development of the overall understanding of these systems.

Suderow, Hermann [2017]

Universidad Autonoma de Madrid

Citation: For groundbreaking contributions to the development of dilution refrigerator scanning tunneling microscopy, and for leading its application to high resolution studies of electronic properties in two-gap, magnetic, and charge-ordered superconductors, and to vortex physics.

Trugman, Stuart A [2017]

Los Alamos National Laboratory

Citation: For outstanding and original contributions to polaron physics, quantum Hall effect, far from equilibrium phenomena, disorder, and superconductivity.

Wang, Ziqiang [2017]

Boston College

Citation: For contributions to the understanding of strongly correlated electron systems, particularly the role of local disorder due to doping; and for successful collaboration with experimental groups to apply his ideas to novel materials including transition metal oxides, pnictides, and chalcogenides.

Wirth, Steffen [2017]

Max Planck Institute

Citation: For his seminal contributions to our understanding of strongly correlated electron systems, especially at reduced length scales, and including the Kondo effect and magnetic interactions.

Woods, Lilia M [2017]

University of South Florida

Citation: For her seminal contributions to the theory of fluctuation-induced and thermoelectric phenomena in condensed matter physics.

Yeom, Han Woong [2017]

Pohang University of Science and Technology

Citation: For contributions to semiconductor surface physics and the electronic properties of epitaxial monolayer materials; and for the discovery of metal-insulator transitions in self-assembled atomic wires on silicon surfaces, a new class of quasi-1D charge-density-wave systems.

DCMP Executive Committee

The Executive Committee Officers and Members-at-Large for the 2018-2019 year (most terms begin after the March Meeting):

Officers:

Chair: Paul Canfield, (3/18 - 3/19)

Iowa State University

Chair Elect: Daniel Arovas, (3/18 - 3/19)

University of California, San Diego

Vice Chair: Eva Andrei, (3/18 - 3/19)

Rutgers University

Past Chair: Meigan Aronson, (3/18 - 3/19)

Texas A&M University

Councilor: John Marston, (1/16 - 12/19)

Brown University

Secretary/Treasurer: Lance Cooper, (3/15 - 3/19)

University of Illinois, Urbana-Champaign

Members-at-Large:

Erica Carlson, (3/16 - 3/19)

Purdue University

Stephen Nagler, (3/16 - 3/19)

Oak Ridge National Laboratory

Douglas Natelson, (3/16 - 3/19)

Rice University

Mark Freeman, (3/17 - 3/20)

University of Alberta

Kathleen Stebe, (3/17 - 3/20)

University of Pennsylvania

Rashid Zia, (3/17 - 3/20)

Brown University

Leon Balents, (3/18 - 3/21)

University of California, Santa Barbara

Shawna Hollen, (3/18 - 3/21)

University of New Hampshire

Philip Phillips, (3/18 - 3/21)

University of Illinois, Urbana-Champaign