

In this issue

- [A Message from the Chair](#)
- [New members of the Executive Committee](#)
- [Call for DMP Focus Session Topics for 2017 APS March Meeting](#)
- [New Members of the Executive Committee](#)
- [March Meeting: Location](#)
- [March Meeting: DMP Sponsored Meetings](#)
- [Division of Materials Physics Ovshinsky Student Travel Awards](#)
- [Award and Prize Recipients and New APS Fellows](#)
- [March Meeting: DMP Sponsored Symposia & Special Events](#)
- [March Meeting: Pre-meeting Workshops](#)
- [March Meeting: Tutorials](#)
- [DMP Executive Committee](#)

A Message from the Chair

With the 2016 March meeting less than a month away, I want to take this opportunity to tell you a bit about the DMP program and to alert you to upcoming important deadlines where you, the DMP Membership, play a key role in keeping DMP a leading, vibrant, unifying element of the APS.

This Newsletter itself is your first guide to the wide variety of DMP sessions and activities to be found in Baltimore. DMP leads 19 Focus Topics comprising 115 sessions that capture the breadth of materials physics, with science ranging from iron-based superconductors to 2D materials, and from halide perovskites to metamaterials. As part of the scientific program, we will recognize the recipients of the McGroddy Prize for New Materials, Mercuri Kanatzidis, and the Adler Lectureship awardee, Harry Atwater. Our current Vice Chair, Dan Dessau, has assembled an outstanding lineup of speakers for the annual 'Physics for Everyone' Symposium on Wednesday, including Rush Holt, current AAAS Chief Executive, Millie Dresselhaus reminiscing on her career in nanoscience, Alan Wilner on the optics revolution underlying the internet, Duncan Watts from Microsoft Research on computational social science, and Gene Stanley telling us about one of the most important and complicated materials – water.

We will recognize our award winners and the 16 new APS Fellows nominated through DMP on Tuesday evening, March 15, from 5:30-7:00 in the Hilton Baltimore Key Ballroom 4. This event also showcases DMP's commitment to promote early career scientists through the Ovshinsky Travel Awardees, the IUPAP C-10 Young Scientist Prize, and the second Richard L. Greene Dissertation Award in Condensed Matter and Materials Physics. I hope you will be able to join us on Tuesday evening to celebrate these outstanding DMP colleagues. The annual DMP Business meeting follows immediately in the Hilton Holiday Ballroom 1.

As you have been notified already, now is the time to propose new Focus Topics next year's March Meeting by contacting Dan Dessau, who will be the DMP Program Chair for the 2017 March Meeting, March 13 – 17 in New Orleans, LA. The DMP focus topics provide an

opportunity to gather related talks in distinct and well-defined focus sessions on topics of intense interest; they also provide the opportunity to mix invited and contributed talks in the same forum. Your colleagues will appreciate and benefit from your suggestions, so please send your best ideas to Dan (Dessau@colorado.edu) following the instructions found later in this Newsletter. Later in the spring, the complete list of focus topics will be announced. Please consider suggesting invited speakers to the organizers; your input is critical to the success of these core DMP contributions to the program.

DMP sponsors two major recognitions: the David Adler Lectureship Award in the Field of Materials Physics, and the James C. McGroddy Prize for New Materials. Please consider who among your colleagues might be deserving of one of these high visibility, prestigious awards and put together an application package. The deadline for 2017 nomination packages is **July 1, 2016**. See <http://www.aps.org/programs/honors/> for details of the nomination processes.

New APS Fellowship nominations are also on the horizon, with DMP requesting the nomination packages by **May 2, 2016**. You can find information on how to nominate your colleagues at <http://www.aps.org/programs/honors/fellowships>. Amanda Petford-Long, who will join the DMP officers as Vice-Chair immediately following the March Meeting will chair the selection process and looks forward to your suggestions.

Finally, I would like to take this opportunity to thank the DMP Executive committee, and in particular Michael Flatté and Secretary-Treasurer Robert Nemanich, for their tireless efforts and commitment to improving DMP and APS more broadly. If you liked the virtual board at the Sorter's Meeting, you have Michael to thank. Also, a word of appreciation to Laura Greene, immediate Past-Chair, whose DMP Executive Committee service is wrapping up. I would like to thank her for her sage advice and leadership; please join me in wishing Laura the best as she moves up the APS Presidential Line. It has been a pleasure serving with all of them as we have set out to represent you, the diverse, energetic, and thoughtful membership not only through the meeting program but also through ongoing engagement with APS leadership. DMP is a thriving, vital, unifying part of APS, and it has been an honor serving as your Chair for the past year.

See you in Baltimore!

John Mitchell, DMP Chair

Call for DMP Focus Session Topics for 2017 APS March Meeting

The Division of Materials Physics sponsors a wide range of Focus Topics as its primary structure for the March Meeting. Typically spanning several sessions throughout the March Meeting, Focus Topics allow an in-depth view of forefront materials physics research areas and connect invited speakers to associated contributed abstracts.

Each year, the existing set of Focus Topics is evaluated for inclusion in the next year's program. In addition, new candidates for Focus Topics are considered based on timeliness, an assessment of the community interest, and uniqueness with the existing DMP program and those of sister units. Ideas coming from the DMP community at large are an extremely important part of this process.

To that end, the DMP Executive Committee solicits your input for the 2017 Focus Topic slate. New Focus Topics should represent a significant topic that would support 3 or more March Meeting sessions (each session typically has 1 invited talk and 12 related contributed talks).

Please send proposed Focus Topics to DMP Secretary/Treasurer Robert Nemanich (robert.nemanich@asu.edu) by **Friday, March 4, 2016**. Please include

- Descriptive Title of the Focus Topic
- The nominator's name, affiliation, phone number and e-mail address
- A brief abstract noting timeliness and uniqueness of the topic relative to the existing program (for examples: <http://www.aps.org/units/dmp/invited-speaker.cfm>).
- A description of the intended audience that supports the size and scope of a Focus Topic.
- Suggestions for possible organizers.

Any additional information you would like to provide that will help the DMP Executive Committee in its decision-making process will be appreciated. For your reference, a complete list of the 2016 Focus Topics is included in this mailing. Full descriptions of the 2016 Focus Topics can be found online at <http://www.aps.org/units/dmp/invited-speaker.cfm>.

If you have any questions or would like assistance in the preparation of your proposal, please contact DMP Chair John Mitchell (mitchell@anl.gov).

Thank you in advance for your help in this extremely important part of planning for the future success of the DMP program.

Sincerely,

Dan Dessau, DMP Vice-Chair and 2017 Program Chair

Michael Flatté, DMP Chair-Elect and 2016 Program Chair

DMP led Focus Topics for 2016 (More details at <http://www.aps.org/units/dmp/invited-speaker.cfm>)

- 7.1.1: Dielectric and Ferroic Oxides
- 7.1.2: Topological Materials: Synthesis and Characterization
- 7.1.4: Strongly spin-orbit coupled oxides/emergent entwinement
- 7.1.5: Organometal Halide Perovskites; Photovoltaics and beyond
- 8.1.2: Dopants and Defects in Semiconductors
- 9.1.1: Fe-based Superconductors
- 12.1.1: 2D materials: synthesis, defects, structure and properties
- 12.1.2: 2D materials: semiconductors
- 12.1.3: Devices from 2D materials: function, fabrication and characterization
- 12.1.4: 2D materials: metals, superconductors, and correlated materials
- 12.1.5: Carbon Nanotubes and Related Materials: Synthesis, Properties, and Applications
- 12.1.6: Van der Waals Bonding in Advanced Materials
- 12.1.7: Computational Discovery and Design of New Materials
- 13.1.1: Nanostructures and Metamaterials
- 13.1.2: Many-body perturbation theory for electronic excitations in materials
- 13.1.3: Electron, Ion, and Exciton Transport in Nanostructures
- 13.1.4: Complex Oxide Interfaces and Heterostructures
- 13.1.5: Thermoelectric Phenomena, Materials, Devices, and Applications
- 13.1.6: Mesoscopic Materials and Devices

New Members of the Executive Committee

The following members were elected to serve on the DMP Executive Committee:

Vice Chair: Amanda K. Petford-Long, Argonne National Laboratory

Member at Large: Scott Chambers, Pacific Northwest National Laboratory

Member at Large: Michelle Johannes, Naval Research Laboratory

We congratulate the new members of the Executive Committee and look forward to their participation and leadership.

March Meeting: Location

The 2016 March Meeting of the APS will take place, March 12-18, 2016 in the Baltimore Convention Center, Baltimore, Maryland. All scientific sessions will be in the Convention Center but events and activities may be in the Convention Center or the Baltimore Hilton Inner Harbor hotel. Check event details for time and place.

For further information see:

<http://www.aps.org/meetings/march/index.cfm>

For the DMP sponsored sessions see:

<http://meetings.aps.org/Meeting/MAR16/SessionIndex2?SponsorID=DMP>

March Sponsored Meetings: DMP/DCMP Fellows and Awards Reception and Business Meeting

The Division of Materials Physics will sponsor the following meetings during the 2016 March meeting. This is your opportunity to interact with the Executive Committee and to become informed of the activities of the Division.

Tuesday, March 15

DCMP/DMP New Fellows & Award Winners Reception

5:30 p.m. - 7:00 p.m.

Hilton Baltimore Key Ballroom 4

DMP Business Meeting, (JA50)

7:00-8:00pm

Baltimore Hilton Inner Harbor - Holiday Ballroom 1

Division of Materials Physics Ovshinsky Student Travel Awards

The Ovshinsky Student Travel Awards and Honorable Mention Awards have been established to assist the career of student researchers. The Awards are in memory of Iris and Stanford Ovshinsky who had a very strong interest and commitment to scientific education. The awards have been endowed by the Ovshinsky family, their colleagues at Energy Conversion Devices (ECD) companies and all their numerous friends from many social, intellectual and business relationships.

We are extremely grateful to the Ovshinsky family for this award. Since the original launch of the award, the family have provided further gifts to endow the awards.

The Ovshinsky Student Travel Awards will be presented at the DCMP/DMP New Fellows and Award Winners Reception, Tuesday, March 15, 5:30 p.m. in Hilton Baltimore Key Ballroom 4

The recipients of the 2016 Ovshinsky Student Travel Awards for Materials Physics are:

NAME	INSTITUTION
Lars Bjaalie	University of California Santa Barbara
Guillaume Froehlicher	IPCMS (CNRS & Universit de Strasbourg),
Charlotte Herbig	University of Cologne
Liang Hong	University of Illinois at Chicago
Tianyi Liu	University of Pennsylvania
Arun Mannodi-Kanakkithodi	University of Connecticut
Minh-Hai Nguyen	Cornell University
Michael Veit	Stanford University
Joshua Young	Drexel University
Xiao-Xiao Zhang	Columbia University

The recipients of the 2016 Ovshinsky Student Travel Honorable Mention Awards for Materials Physics are:

NAME	INSTITUTION
Mohammad Atif Faiz Afzal	University at Buffalo, SUNY
Jihong Al-Ghalith	University of Minnesota, Twin Cities
Anushika Athauda	University of Virginia
Wei Jiang	University of Utah
Ryan Need	University of California Santa Barbara
Sobhit Singh	Department of Physics and Astronomy
Sai Swaroop Sunku	Columbia University
Renan Villarreal	University of Geneva
Wennie Wang	University of California, Santa Barbara
Melanie White	University of Las Vegas - Nevada
Yichao Xu	University of California, San Diego

Award and Prize Winners

James C. McGroddy Prize for New Materials

[Mercouri G. Kanatzidis](#), Northwestern University

“For seminal contributions to the discovery of new families of thermoelectric materials with the highest known figure of merit.”

David Adler Lectureship Award

[Harry A. Atwater](#), California Institute of Technology

“For pioneering work in photonics, plasmonics, optical metamaterials, and photovoltaics, and for his outstanding presentations and outreach to the general audience.”

IUPAP Young Scientist Prize in the Structure and Dynamics of Condensed Matter (C10)

Wenzhong Bao, Department of Microelectronics, Fudan University, China

“For his outstanding contribution in electrical and mechanical properties of the low-dimensional quantum materials.”

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

[Susanne Baumann](#), IBM Almaden Res Ctr

“For outstanding work in measuring and controlling the spin properties of individual magnetic atoms on surfaces by high-resolution scanning tunneling microscopy.”

[Alexander Steppke](#), University of St Andrews

“For thermodynamic study of quantum criticality in $\text{Yb}(\text{Rh}_{0.93}\text{Co}_{0.27})_2$ and $\text{YbNi}_4(\text{P}_{1-x}\text{As}_x)_2$.”

2015 APS Fellows nominated through DMP:

Eric Bauer (Los Alamos National Laboratory)

For outstanding and original contributions to the discovery and understanding of correlated electron systems, specifically for the study of complex electronic states hosted by correlated actinide and rare-earth materials.

Scott Chambers (Pacific Northwest National Laboratory)

For pioneering contributions in the growth and properties of crystalline oxide films, particularly the fundamental relationships between composition and structure, and the resulting electronic, magnetic, and photochemical properties.

Craig Fennie (Cornell University)

For the invention of novel mechanisms enabling dielectric, ferroelectric, and multiferroic functionalities in complex oxides, and identification of materials realizations through first principles methods.

Jaime Fernandez-Baca (Oak Ridge National Laboratory)

For seminal neutron scattering studies of magnetic materials, especially the spin and lattice dynamics of colossal magnetoresistive manganites.

Sergei Kalinin (Oak Ridge National Laboratory)

For foundational contribution to nanoscale electromechanics and revolutionary studies of defect-mediated phase transitions, energy conversion, and electrochemical reactivity at the nanometer and atomic scales enabled by advanced scanning probe microscopy techniques.

Ron Lifshitz (Tel Aviv University)

For the theory of nonlinear dynamics and relaxation of vibrational modes in nanomechanical systems and for groundbreaking results on the symmetry stabilization, and photonic and magnetic properties of quasicrystals.

Junming Liu (Nanjing University)

For seminal contributions to the synthesis and characterization of multiferroic materials and other complex transition metal oxides, and to the understanding of physics of rare-earth manganites with multiferroicity and colossal magnetoresistance.

Michael Manfra (Purdue University)

For advancing MBE growth of AlGaAs/GaAs and AlGaN/GaN heterostructures that enable fundamental understanding of 2D electron correlation effects and realization of novel devices.

Carlos Meriles (City College of New York)

For creative contributions to the development of novel techniques in magnetic resonance, including ex-situ MRI scanning, spin hyperpolarization and optical detection.

Ning Pan (University of California, Davis)

For significant contributions to the scientific research of mechanics and physics in the field of fibrous materials.

John Pendry (Imperial College London)

For the discovery of metamaterials.

Antoni Planes (Universitat de Barcelona)

For outstanding and original contributions to the study of fundamental aspects of phase transition dynamics in functional materials.

Ramamurthy Ramprasad (University of Connecticut)

For pioneering contributions to the computation-driven rational design of materials, especially polymeric and inorganic dielectric materials and catalysts.

Tanusri Saha-Dasgupta (S.N. Bose National Centre for Basic Sciences)

For development of fast and accurate electronic structure methods allowing the combined study of material-specific and many-body aspects, and their application in understanding the transition-metal oxides and quantum spin systems.

Liling Sun (Institute of Physics, Chinese Academy of Sciences, Beijing)

For outstanding contributions in the study of iron-based superconductors and other quantum correlated materials, and in the development of state-of-the-art systems for in-situ high pressure measurements.

Yang Yang (University of California, Los Angeles)

For extraordinary contributions in organic and hybrid electronic materials, interfacial engineering, and novel device design that have led to highly efficient organic and hybrid solar cells, digital memory devices, vertical transistors, and organic LEDs.

March Meeting: DMP Sponsored Symposia & Special Events

DMP Invited Symposia

C13. [DMP Prize Session](#) (Harry Atwater, Adler Award; Dirk van der Marel, Isakson Prize; D.B. Tanner, Isakson Prize; Alexander Steppke, Greene Dissertation Prize; Susanne Baumann, Greene Dissertation Prize)

L4. [Physics for Everyone](#) (Mildred Dresselhaus; Alan Willner; Duncan Watts; H. E. Stanley; Duncan Watts)

S3. [Towards Design of Correlated Electron Materials](#) (Warren E. Pickett; Lucas Wagner; Chuck-Hou Yee; Emilia Morosan; Hua He)

H2: Graduate Student Lunch with the Experts

Sponsoring Units: APS units at the meeting, Room: TBA, Tuesday, March 3, 12:30 - 2:00PM

Students may sign up (in registration area) on site to enjoy a complimentary box-lunch while participating in an informal discussion with an expert on a topic of interest to them.

DMP Supported Tables include:

“Sharing experiences as a woman in physics,” Amanda Petford-Long, Argonne National Laboratory,

“Spintronics in dissimilar materials,” Chris Palmstrom, UC Santa Barbara

“Quantum engineered materials,” Nitin Samarth, Pennsylvania State University

“Should you choose: tenure or family?” Emilia Morosan, Rice University

“2D materials for optoelectronics and spin-valley physics,” Bernhard Urbaszek, CNRS Toulouse, France

DCMP/DMP New Fellows & Award Winners Reception

Room: Hilton Baltimore Key Ballroom 4, Tuesday, March 3, 5:30 p.m. - 7:00 p.m

DMP: McGroddy Prize, Adler Award, Greene Dissertation Awards, DMP Nominated APS Fellows, Ovshinsky Student Travel Awards

DCMP: Buckley Prize, Onsager Prize, Lilienfeld Prize, Davisson-Germer Prize, Isakson Prize, DCMP Nominated APS Fellows

DMP Business Meeting

JA50. [DMP Business Meeting](#)

DMP Focus Topic Sessions:

Dielectric and Ferroic oxides

A30. [Ferroelectric Heterostructures](#)

C30. [Novel Ferroic Systems](#)

H30. [Novel Behavior at Oxide Interfaces](#)

K30. [Complexity in Ferroic Systems](#)

R30. [Properties of Multiferroic Materials](#)

S30. [Theory of Ferroic Systems](#)

Topological Materials: Synthesis, Characterization and Modeling

A28. [Topological Phases](#)

- B28. [Topological Kondo Insulators](#)
- C28. [Quantum Anomalous Hall Effect I](#)
- H28. [Topological Crystalline Insulators and Quantum Hall Effects.](#)
- K28. [Quantum Anomalous Hall Effect II](#)
- L28. [Topological Crystalline Insulators](#)
- P28. [Advances in Topological Materials I](#)
- S28. [Advances in Topological Materials II](#)
- X28. [Topological Semimetals: Theory](#)
- Y28. [Weyl Semimetals: Theory and New Materials](#)

Strongly spin-orbit coupled oxides/emergent entwinement

- A26. [Experimental Advances in Strongly Spin-orbit Coupled Oxides](#)
- L33. [Kitaev Physics in Honeycomb Iridates](#)

Organometal Halide Perovskites; Photovoltaics and beyond

- R8. [Hybrid Organic Inorganic Perovskite Photovoltaics](#)
- S8. [Electrical Transport and Photoexcitations in Organic/Inorganic Perovskites](#)
- X8. [Organic Inorganic Perovskite Spintronics](#)

Dopants and Defects in Semiconductors

- E51. [Dopants and Defects in Semiconductors: Theory](#)
- H7. [Dopants and Defects in Semiconductors: Spin Related Transport](#)
- K7. [Dopants and Defects in Semiconductors: Nitrides](#)
- L7. [Dopants and Defects in Semiconductors: Novel experimental techniques](#)
- P7. [Dopants and Defects in Semiconductors: Oxides](#)
- V7. [Dopants and Defects in Semiconductors: Silicon and Germanium](#)
- X7. [Dopants and Defects in Semiconductors: Compound Semiconductors](#)

Fe-based Superconductors

- A11. [Pairing Interaction and Gap Symmetry in Fe-based Superconductors](#)
- B11. [Superconductivity in Monolayer FeSe/SrTiO₃](#)
- E11. [Electronic Structure and Magnetism in Fe-based Superconductors I](#)
- F11. [Nematicity in Fe-based Superconductors](#)
- H11. [Correlations and Superconductivity in Fe Chalcogenides I](#)
- K11. [Electronic Structure and Magnetism in Fe-based Superconductors II](#)
- L11. [Novel Physics of Fe-Pnictide Superconductors](#)
- P11. [Correlations and Superconductivity in Fe chalcogenides II](#)
- R5. [Disorder and Substitution Studies in Fe-based Superconductors](#)
- S5. [New Fe-based Superconductors and Related Materials I](#)
- X11. [New Fe-based Superconductors and Related Materials II](#)
- Y20. [Correlations and Superconductivity in Fe-chalcogenides III](#)

2D materials: synthesis, defects, structure and properties

- A17. [Graphene: Growth and Synthesis](#)
- B17. [Graphene: Synthesis, Properties, and Defects](#)
- E16. [Graphene and Graphene Nanoribbons](#)
- H17. [Transition Metal Dichalcogenides: Defects and Degradation](#)
- P15. [2D Materials: Preparation and Characterization](#)
- S26. [2D Materials Beyond Graphene](#)

X14. [Transition Metal Dichalcogenides: Growth and Synthesis](#)

2D materials: semiconductors

F16. [Exciton Dynamics in 2D Semiconductors](#)

L16. [Black Phosphorus Device Physics](#)

R17. [2D Semiconductor Physics I](#)

S17. [2D Semiconductor Physics II](#)

X17. [2D Semiconductor Physics III](#)

Y16. [Silicene, Germanene, and Beyond](#)

Y17. [2D Semiconductor Physics IV](#)

Devices from 2D materials: function, fabrication and characterization

A16. [2D Devices: Sensors and Detectors](#)

B16. [2D Devices: Plasmonics and Optoelectronics](#)

C26. [2D Devices: Low-dimensional Properties and Contacts](#)

E15. [2D Devices: Mobility and Energy Relaxation](#)

F17. [2D Devices: Superconductors, Charge Density Waves, Phase Transitions](#)

H16. [2D Devices: Electronics and Optoelectronics](#)

K16. [2D Devices: Black Phosphorous](#)

L17. [2D Devices: Charge, Spin, and Valley Control](#)

P16. [2D Devices: Black Phosphorous, III-IV, and IV-VI Materials](#)

S16. [2D Devices: Mechanical metamaterials](#)

V17. [2D Devices: Spin Transport, Spin Orbit Coupling](#)

2D materials: metals, superconductors, and correlated materials

R15. [2D Materials: Superconductivity and Correlations I](#)

S13. [2D Materials: Semimetals](#)

S15. [2D Materials: Superconductivity and Correlations II](#)

V15. [2D Materials: Charge Density Waves](#)

X15. [Unconventional Two Dimensional Materials.](#)

Y15. [2D Materials: Superconductivity and Correlations III](#)

Carbon Nanotubes and Related Materials

A27. [Carbon Nanotube & Related Materials: Growth, Separation, and Assembly](#)

F27. [Carbon Nanotube & Related Materials: Optical & Other Properties](#)

K27. [Carbon Nanotubes: Electronic, Transport & Sensing](#)

S27. [Carbon Nanotube & Related Materials: Thermal, Mechanical & other Properties](#)

Van der Waals bonding in advanced materials

X20. [Van der Waals Bonding in Advanced Materials: Carbon Allotropes and Boron Nitride](#)

Y22. [Van der Waals Bonding in Advanced Materials: Methods](#)

Computational Discovery and Design of Novel Materials

B23. [Computational Materials Discovery and Design - Electronic Structure](#)

H23. [Computational Materials Discovery and Design - Materials for Catalysis](#)

K23. [Computational Materials Discovery and Design - Structure Prediction and Phase Diagrams](#)

L23. [Computational Materials Discovery and Design - Graphene and 2D Materials](#)

P23. [Computational Materials Discovery and Design - Defects and Interfaces](#)

Nanostructures and Metamaterials

A23. [Novel Plasmonic Effects and Devices](#)

C23. [Acoustic, Thermal, and Photonic Metamaterial Concepts](#)

E23. [Metamaterial Devices and Applications](#)

F23. [Synthesis, Fabrication and Characterization of Nanostructures](#)

Many-body perturbation theory for electronic excitations in materials

E24. [Many-Body Perturbation Theory for Electronic Excitations: Computational Advances](#)

H24. [Many-Body Perturbation Theory for Electronic Excitations: Excitonic Phenomena](#)

K24. [Many-Body Perturbation Theory for Electronic Excitations: Theoretical Spectroscopy](#)

P24. [Many-Body Perturbation Theory for Electronic Excitations: Electronic Structure](#)

Electron, ion, exciton transport in nanostructures

A24. [Electronic Transport through Individual Nanostructures](#)

B24. [Optical Effects Near Metallic Nanostructures](#)

C24. [Time-resolved Energy Transfer and Exciton Transport in Nanostructures](#)

F24. [Electronic and Optical Properties of Nanoparticle Assemblies](#)

V24. [Electron Transport at Nanoscale Interfaces](#)

Complex Oxide Interfaces and Heterostructures

B30. [Ferroelectric Walls, Heterostructures and Superlattices](#)

E30. [Topological and Correlation Effects in Oxide Heterostructures](#)

F30. [Orbital and Electronic Transitions in Oxide Heterostructures](#)

L30. [Functional Defects in Oxide Heterostructures](#)

P30. [Advances in Complex Oxide Film Growth](#)

V30. [Charge Transfer and Electron Gases at Oxide Interfaces](#)

X30. [Structural and Functional Imaging of Oxide Interfaces](#)

Y30. [Ionically Controlled Transport and Electrooptical Functionalities at Oxide Interfaces](#)

Thermoelectric phenomena, materials, devices

L35. [Thermoelectrics Low Dimensional Materials](#)

P32. [Quantum Thermoelectric Systems](#)

R23. [Thermoelectrics-Nanostructures](#)

S23. [Thermoelectrics Theory I](#)

V11. [Thermoelectrics: McGroddy Prize and Novel Materials](#)

X23. [Thermoelectrics Theory II](#)

Y23. [Thermoelectrics, Low Dimensional Materials](#)

Mesoscopic Materials and Devices (DMP)

L24. [Mesoscopic Materials and Devices I](#)

S24. [Mesoscopic Materials and Devices II](#)

March Meeting: Pre-meeting Workshops

2016 Physics Teacher Education Coalition Conference

March 11 - 13, 2016 in Baltimore, Maryland at the Royal Sonesta Harbor Court - Baltimore

U.S.-Brazil Young Physicists Forum for Early Career Physicists

Saturday, March 12 - Sunday, March 13, 2016, TBD

DPOLY Short Course on "Polymer Nanocomposites: Challenges and Opportunities" Structure, Dynamics, and Processing of Polymer Nanocomposites

Saturday, March 12 - Sunday, March 13, 2016, TBD

Professional Skills Development Workshop - Women Postdocs and Early Career Women Physicists

March 13, 8:00 am- 6:30 pm, TBD

Integrating Computation into the Undergraduate Physics Curriculum

March 13, 1:00 pm- 5:30 pm, TBD

Periscope: Looking Into Learning in Best Practices in University Physics Classrooms

March 13, 4:00 pm- 6:00 pm, TBD

National Mentoring Community (NMC) Get-together

March 13, 5:00 pm- 6:00 pm, TBD

First-Time Attendee Orientation

March 13, 6:00 pm- 7:00 pm, TBD

March Meeting: Tutorials

Sunday, March 13

Morning Tutorials, Convention Center, 8:30 a.m. - 12:30 p.m.

Tutorial #1: Density Functional Theory

Instructors: Neepa Maitra, Hunter College & Graduate Center of the City University of New York, John Perdew, Temple University, Carsten Ullrich, University of Missouri-Columbia, Adam Wasserman, Purdue University

Tutorial #2: Probing Photovoltaic Devices with State-of-the-Art Imaging Tools

Instructors: Mariama Bertoni, Arizona State University, Knut Deppert, Lund University, Sweden, Marina Leite, University of Maryland, College Park, Susanna Thon, John Hopkins University

Tutorial #3: Quantum Spintronics

Instructors: David D. Awschalom, University of Chicago, Christoph Boehme, University of Utah, Michael E. Flatté, University of Iowa, Evelyn Hu, Harvard University

Tutorial #4: X-ray Scattering in Condensed Matter Physics

Instructors: Aaron Lindenberg, Stanford University, Karl Ludwig, Boston University, Mark Dean, Brookhaven National Laboratory, Stephen Kevan, Lawrence Berkeley Laboratory/University of Oregon,

Tutorial #5: Colloids and Granular Materials

Instructors: Karen Daniels, North Carolina State University, Scott Franklin, Rochester Institute of Technology, Eric Weeks, Emory University, Roseanna Zia, Cornell University

Afternoon Tutorials, Convention Center, 1:30 p.m. - 5:30 p.m.

Tutorial #6: Quantum Characterization, Verification, & Validation (QCVV)

Instructors: Joseph Emerson, University of Waterloo / IQC, Steven Flammia, University of Sydney, Jay Gambetta, IBM, Kenneth Rudinger, Sandia National Labs, Erik Nielsen, Sandia National Labs

Tutorial #7: Characterization of materials through many body theory from ABINIT

Instructors: Fabien Bruneval, CEA Saclay, France, Gian Marco Rignanese, Université Catholique de Louvain, Belgium, Bernard Amadon, CEA Arpajon, France, François Jollet, CEA Arpajon, France

Tutorial #8: Mathematica and WOLFRAM Language for Physics Education and Research

Instructors: Craig Carter, MIT, Marco Thiel, University of Aberdeen, Terry Honan, Blinn College

Tutorial #9: Statistical Analysis and Molecular Dynamics Simulations of Biological Systems

Instructors: Rafael C. Bernardi, University of Illinois at Urbana-Champaign, Anirvan Sengupta, Rutgers University

Tutorial #10: Introduction to Computational Quantum Nanoelectronics

Instructors: Anton Akhmerov, TU Delft, Netherlands, Christoph Groth, SPSMS, CEA, INAC Grenoble France, Xavier Waintal, SPSMS, CEA, INAC Grenoble France, Michael Wimmer, TU Delft, Netherlands

March Meeting: Editorial Events:

Sessions J1 and N1: Meet the APS Editors Reception & Coffee Break

Reception: Convention Center, TBD; Tuesday, March 15, 4:30 – 6:00 pm

Coffee Break: Convention Center, TBD; Wednesday, March 14, 10:45 - 11:30 am

The editors of the APS journals invite you to join them for a reception and a coffee break. The editors will be available to answer questions, hear ideas, and discuss comments about the journals.

DMP Executive Committee

The Executive Committee Officers and Members-at-Large for the 2016-2017 year, who begin their (terms begin following the March Meeting):

Officers:

Chair: Michael E. Flatté, (04/16 - 03/17)
University of Iowa
Chair Elect: Daniel S. Dessau, (04/16 - 03/17)
University of Colorado, Boulder
*Vice Chair: Amanda K Petford-Long, (04/16 - 03/17)
Argonne National Laboratory
Past Chair: John F. Mitchell, (04/16 - 03/17)
Argonne National Laboratory
Councilor: James Robert Chelikowsky, (01/13 - 12/16)
University of Texas, Austin
Secretary/Treasurer: Robert J. Nemanich, (04/14 - 03/17)
Arizona State University

Members-at-Large:

Julie Borchers, (04/14 - 03/17)
National Institute of Standards & Technology
David Burnham Tanner, (04/14 - 03/17)
Univ of Florida – Gainesville
Peter M. Gehring, (04/15 - 03/18)
NIST Center for Neutron Research
John Singleton, (04/15 - 03/18)
National High Magnetic Field Laboratory, Los Alamos National Laboratory
*Scott Chambers, (04/16 - 03/19)
Pacific Northwest National Laboratory
*Michelle Johannes, (04/16 - 03/19)
Naval Research Laboratory

*Newly elected