

FINANCIAL OPPORTUNITIES FOR STUDENTS

APS and its Units have worked to create opportunities that help fund student research and travel to meetings. These awards and funding opportunities strive to recognize exceptional young scientists and promote their work and dedication.

Highlighted in this brochure are many of the resources available to students. This information includes programs identified as of January 2019. Please visit the APS website, aps.org, to keep updated on new and upcoming opportunities.

Trish Lettieri

Director of Membership

Insh Jetteen

American Physical Society



STUDENT FUNDING 2019

FUTURE OF PHYSICS DAYS TRAVEL AWARD

The Future of Physics Days (FPD) Travel award is for undergraduates presenting research at the APS March or April Annual Meetings. All presenting undergraduates are eligible for travel reimbursement up to \$500. In order to be eligible for this award, students must submit an abstract (as the primary author/presenter), be registered for the meeting, and provide a letter of recommendation from a faculty advisor or research mentor. This award is for undergraduate students only. For more information please visit our Future of Physics Days Travel Award page: aps.org/meetings/events/futurephysics/travelgrants.cfm

INDIA-U.S. TRAVEL PROGRAM

The APS-IUSSTF Physics Ph.D. Student and Postdoc Visitation Program allows U.S. and Indian graduate students and postdocs to apply for travel funds of \$3,000 to pursue opportunities in physics. The funds can be used to attend a short-course or summer institute, work temporarily in a laboratory, or for another opportunity that the applicant and host believe is worthy of support. The program aims to mostly support travel to India by U.S. residents, while enabling some students and postdocs from India to travel to the United States. This program is funded by the Indo-U.S. Science & Technology Forum (IUSSTF) and administered by APS: aps.org/programs/international/honors/us-india-travel.cfm

BRAZIL-U.S. EXCHANGE PROGRAM

The Brazil-U.S. Exchange Program allows physics Ph.D. students and postdocs in the U.S. to apply for travel funds in order to pursue a breadth of opportunities in physics in Brazil, such as attending a short-course or summer institute, working temporarily in a lab, or another opportunity that the applicant and host believe is worthy of support. Grants are for up to \$3,000. Graduate students in Brazil can also apply to the Sociedade Brasileira de Física (SBF) for travel funds to travel to the U.S. Additional information, including application guidelines for U.S. applicants, can be found at: aps.org/programs/international/programs/brazil.cfm

Left: Spin freezing into a disordered state in $CaFeTi_2O_6$ synthesized under high pressure [X. Li, *et al.*, Phys. Rev. B **98**, 064201 (2018)].

DIVISIONS

ATOMIC, MOLECULAR, & OPTICAL PHYSICS (DAMOP)

DAMOP, along with other sponsors, provides travel grants to undergraduate and graduate students to attend the DAMOP Annual Meeting each year. The travel awards range from \$300 to \$500 per student. Instructions for applications will be posted at: aps.org/units/damop/meetings/annual/travel.cfm

DAMOP also strongly supports excellence in graduate research through the annual Deborah Jin Award for Outstanding Doctoral Thesis Research in Atomic, Molecular, or Optical Physics. The finalists are chosen by the Deborah Jin Award Committee and receive \$1000 to attend the Annual Meeting, competing through presentations made at the DAMOP Thesis Prize Session. The winner receives a certificate and \$2500. Additional information may be found by visiting: aps.org/programs/honors/prizes/amo.cfm

BIOLOGICAL PHYSICS (DBIO)

DBIO will award several travel grants of up to \$400 per student as the first author of contributed papers (talks or posters) in sessions sponsored by DBIO at the March Meeting. For more information, please see: aps.org/units/dbp/awards/student.cfm

DIVISION OF CHEMICAL PHYSICS (DCP)

DCP New Investigator Travel Awards of up to \$500 are available for graduate students and postdoctoral researchers within two years of their Ph.D. who present a paper at one of the DCP Symposia at the APS March Meeting. Eligible expenses include reduced rate airfare or car travel, registration, economy room and board for the duration of the meeting, and a child-care stipend for a parent attending the meeting. For more information, please visit:

aps.org/units/dcp/awards/gsta.cfm or aps.org/units/dcp/awards/

COMPUTATIONAL PHYSICS (DCOMP)

DCOMP annually awards the **Nicholas Metropolis Award** for Outstanding Doctoral Thesis Work in Computational Physics. The award consists of \$2,500 and a certificate to be presented at an awards ceremony at the Division of Computational Physics annual meeting and an additional allowance of up to \$1500 to travel to the meeting. For more information, please visit **aps.org/programs/honors/dissertation/metropolis.cfm**. DCOMP also awards travel grants to student members (undergraduate or graduate) who are presenting a talk in a DCOMP sponsored or co-sponsored session. Award amounts will vary by demand, but usually will be less than \$500. Preference is given to speakers giving invited talks. Application procedures will be announced via an email to DCOMP members in late winter giving instructions for how to apply to both the March and April annual meetings.

FLUID DYNAMICS (DFD)

The Andreas Acrivos Dissertation Award in Fluid Dynamics annually provides recognition to exceptional young scientists who have performed original doctoral thesis work of outstanding scientific quality in fluid dynamics. The annual award consists of \$1,000, a certificate citing the accomplishments of the recipient, and an allowance of up to \$1,500 for travel to attend the annual meeting of the Division of Fluid Dynamics. For more information, please visit: aps.org/units/dfd/awards/acrivos.cfm

DFD wishes to promote the subject of fluid dynamics and to help those who find the financial burden of the annual meeting difficult. The DFD funds Travel Awards of \$500 for young researchers located in North America and \$1,000 for those located elsewhere. For more information, please visit: aps.org/units/dfd/programs/index.cfm

GRAVITATIONAL PHYSICS (DGRAV)

DGRAV presents annually a \$200 award to the best talk presented by a student in each of the regional Gravity Meetings: East Coast, Pacific Coast, Gulf Coast, and Midwest. For more information, please visit: aps. org/units/dgrav/awards/student.cfm

Left: Perturbing cyclic predator-prey systems: How a six-species coarsening system with nontrivial indomain dynamics responds to sudden changes [Shadisadat Esmaeili *et al.*, Phys. Rev. E **98**, 062105 (2018)].

DGRAV (continued)

DGRAV awards travel grants for outstanding students to present talks in DGRAV sessions at the annual APS April meeting. Eligible expenses include airfare, car travel, registration and lodging, and the awards are up to \$300 per individual. For more information, please visit: aps.org/units/dgrav/awards/travel-grants.cfm

LASER SCIENCE (DLS)

DLS provides partial funding (up to \$500) for a limited number of graduate students to attend and participate in two major meetings, CLEO in the spring and Frontiers In Optics/ Laser Science in the fall, as well as the APS March Meeting. Eligible attendees will be members of the DLS who have earned their doctoral agree at a university in the United States or abroad, and who have completed all requirements for the Ph.D. within three years of the application deadline. For further information, please visit: aps.org/units/dls/student.cfm

Carl E. Anderson Division of Laser Science Dissertation Award Eligible attendees will be doctoral students at any university in the United States or abroad who have passed their dissertation defense for the Ph.D. any time during the three calendar years preceding the application deadline. aps.org/units/dls/awards/laser.cfm

THE DIVISION OF MATERIALS PHYSICS (DMP)

DMP Ovshinsky Student Travel Awards have been established to assist the career of outstanding student researchers. There will be about ten \$500 awards and ten \$150 honorable mention awards each year to enable students to participate in the APS March Meeting sessions, which are sponsored by the Division of Materials Physics. The selection will be based on merit and the student's contribution. For more information please visit:

aps.org/units/dmp/meetings/travel.cfm

NUCLEAR PHYSICS (DNP)

DNP offers a Dissertation award consisting of \$2,500, plus an allowance for travel to the annual Fall Meeting of DNP, at which the award will be presented and a talk will be given in a DNP invited paper session. Nominations are open to any person who has received a PhD in experimental or theoretical nuclear physics from a North American university within the two-year period preceding the nomination deadline of July 1st. For more information please visit: aps.org/units/dnp/awards/nuclear.cfm

DNP provides a limited number of \$400 student travel awards to encourage graduate students to participate in the APS April Meeting. Selection is based upon merit and need. Information is posted on the DNP web page aps.org/units/dnp/awards/travel-grants.cfm in early January.

DNP co-sponsors the Conference Experience for Undergraduates (CEU) program along with the National Science Foundation's Physics Division and the Department of Energy's Office of Nuclear Physics. Travel and lodging grants are awarded to undergraduate students to attend the DNP fall meeting and to present posters detailing their research in the field of nuclear physics. For more information, please visit: uwlax.edu/ceu/

PARTICLES AND FIELDS (DPF)

DPF provides partial travel support for a limited number of students to attend the APS April Meeting. The travel award will be up to \$300 in a travel reimbursement, depending on the number of travel award recipients. To be eligible for the award, a student must be presenting a paper at the meeting in the category of Particles and Fields and must be a student at a U.S. educational institution. For more information, please visit: aps.org/units/dpf/meetings/students.cfm

J.J. and Noriko Sakurai Dissertation Award - The award recognizes exceptional young scientists who have performed original doctoral thesis work of outstanding scientific quality and achievement in the area of theoretical particle physics. The annual award consists of \$1,500, a certificate citing the accomplishments of the recipient, and an allowance of up to \$1,000 for travel to attend the APS April Meeting where the award will be

Left: Attospin and channel closings in high-order above-threshold ionization by bicircular laser fields [D. B. Milošević, Phys. Rev. A **98**, 053420 (2018)].

DPF (continued)

presented. For more information, please visit: aps.org/units/dpf/awards/particle.cfm

Mitsuyoshi Tanaka Dissertation Award in Experimental Particle Physics - To provide recognition to exceptional young scientists who have performed original doctoral thesis work of outstanding scientific quality and achievement in the area of experimental particle physics. The annual award consists of \$1,500, a certificate citing the accomplishments of the recipient, and an allowance of up to \$1,000 for travel to attend the annual meeting of the Division of Particles and Fields (DPF) at which the award will be presented. For more information, please visit: aps.org/units/dpf/awards/tanaka.cfm

PHYSICS OF BEAMS (DPB)

DPB recognizes doctoral thesis research of outstanding quality and achievement in beam physics and engineering. The annual award consists of \$2,500 and a certificate to be presented at an awards ceremony at the DPB Annual Meeting, and an additional allowance of up to \$500 for travel to the meeting. The recipient will be invited to present the work as an invited talk in an appropriate session of the meeting. For more information: aps.org/units/dpb/awards/beam.cfm

PLASMA PHYSICS (DPP)

Marshall N. Rosenbluth Outstanding Doctoral Thesis Award

To provide recognition to exceptional young scientists who have performed original thesis work of outstanding scientific quality and achievement in the area of plasma physics. The award consists of \$2,000 and a certificate to be presented during the award ceremony at the banquet for the DPP Annual Meeting. For more information, please visit: aps.org/programs/honors/dissertation/rosenbluth.cfm

DPP Student Travel Grant Program will have information regarding the student travel grant program available on the DPP website close to the meeting dates: apsdpp.org

POLYMER PHYSICS (DPOLY)

The **Padden Award** is given yearly to graduate students for "Excellence in Polymer Physics Research." Details of the qualifications for the award and the deadlines are listed on the web site: units.aps.org/dpoly/prizes/padden.cfm. The division reimburses APS March Meeting registration for Padden Finalists who are international student members studying outside the US and Canada. DPOLY often supports a number of students to attend the DPOLY Short Course held each March just ahead of the APS March Meeting. This is limited to students who are members of DPOLY and generally consists of the division (or other sponsors) covering the cost of the student's course registration (typically \$150).

TOPICAL GROUPS

FEW-BODY SYSTEMS AND MULTIPARTICLE DYNAMICS (GFB)

GFB wants to encourage the participation of young researchers at the APS April Meeting and at the meeting of the Division of Atomic, Molecular, and Optical Physics. To apply, the young researcher should fill out the online form at jila.colorado.edu/~jpdincao/Site/GFB2019.html

HADRONIC PHYSICS (GHP)

GHP has established a Biennial Dissertation Award, consisting of \$1500 and a travel allowance of up to \$1500 to attend the biennial meeting of the Topical Group on Hadronic Physics. Nominations for the 2021 award are due September 6, 2020. For more information, please visit: aps.org/units/ghp/awards/hadronic.cfm

GHP also provides a limited number of travel awards, including complimentary registration, to encourage graduate students to participate in the biennial GHP meeting, held in odd years before the APS April Meeting. Students must submit an abstract to present a talk and provide a state-

Left: Spin freezing into a disordered state in CaFeTi $_2\mathrm{O}_6$ synthesized under high pressure [X. Li, et al., Phys. Rev. B 98, 064201 (2018)].

GHP (continued)

ment of support from their advisor to the conference email address, ghpworkshops@gmail.com. Selection is based upon merit and need.

INSTRUMENT AND MEASUREMENT SCIENCE (GIMS)

GIMS offers student travel support of up to \$500 for student presenters at March meeting sessions that are sponsored by GIMS. For information regarding deadlines and contact information, please visit: aps.org/units/gims/travel-grants.cfm

MAGNETISM (GMAG)

GMAG sponsors Outstanding Dissertation in Magnetism
Awards and will present up to three dissertation awards at the
next APS March Meeting. These awards will recognize students who have conducted outstanding research leading to their
dissertation and will consist of an invited talk in an appropriate
session at the APS March Meeting, a \$500 prize to the student, and
up to \$250 toward his/her travel expenses to the APS March Meeting. More details and deadlines for these programs can be found in
the GMAG newsletter: aps.org/units/gmag/awards/index.cfm

To increase student participation and involvement in activities essential to GMAG and APS as a whole, GMAG will sponsor up to ten Student Travel Awards for the March Meeting. The award will consist of \$250 in travel assistance to attend the meeting.

SHOCK COMPRESSION OF CONDENSED MATTER (GSCCM)

GSCCM provides travel grants for students to attend their biennial meetings occurring in odd numbered years. Typically, about \$400 is awarded to each awardee, plus the cost of the conference registration. Deadlines for application are typically early in the year of the conference. Please visit aps.org/units/gsccm/ and click on the link corresponding to the upcoming conference for additional information.

STATISTICAL AND NONLINEAR PHYSICS (GSNP)

The GSNP Graduate Student Speaker Award is for best-contributed talk at the March meeting by a graduate student in the area of Statistical and Nonlinear Physics. Candidates are nominated in advance by their advisors. Five finalists are selected and present their talks in a special session at the March Meeting. The winner will receive a \$1,000 award and each of the other four finalists will receive \$500 awards. In addition, March meeting travel expenses up to \$500 will be covered for each finalist. For more information, please visit: aps.org/units/gsnp/awards/student-speaker.cfm

FORUMS

GRADUATE STUDENT AFFAIRS (FGSA)

FGSA is committed to increasing the participation of graduate students and other young researchers in scientific conferences and workshops, and has funds available to help cover the cost of travel to such scholarly meetings. We invite applications for travel grants up to \$500 for travel. Awards are limited to one trip per calendar year per person, and the recipient must be a member of the APS and the FGSA. Applications are accepted each quarter. For more information, please visit:

aps.org/units/fgsa/activities/travelgrants.cfm

HISTORY OF PHYSICS (FHP)

FHP sponsors a travel grant of up to \$750 to help with costs associated with attending a meeting; the student must give a talk in an FHP session. A call for proposals usually goes out near the start of the academic year; applicants are asked to submit a brief (1-2 pages) description of their proposed talk. Open to either undergraduate or graduate students. aps.org/units/fhp/awards/student/index.cfm

INDUSTRIAL AND APPLIED PHYSICS (FIAP)

FIAP sponsors the **Ken Hass Outstanding Student Paper Award**. The purpose of this award is to recognize outstanding student papers on industrial applications of physics submitted to a sorting category or a focus

Left: Perturbing cyclic predator-prey systems: How a six-species coarsening system with nontrivial indomain dynamics responds to sudden changes [Shadisadat Esmaeili *et al.*, Phys. Rev. E **98**, 062105 (2018)]

FIAP (continued)

session sponsored or co-sponsored by the Forum on Industrial & Applied Physics (FIAP) at the APS March meeting. The award consists of \$1,000 and a certificate citing the name of the recipient and the title of the paper. It will be awarded annually at the FIAP business meeting. For more information, please visit: aps.org/units/fiap/awards/hass.cfm

SECTIONS

FAR WEST SECTION (FWS)

The Far West Section subsidizes travel for students to the section's annual meeting. The student must submit an abstract to the meeting and indicate when registering for the meeting whether he/she would need a shared hotel room. Students will also be considered for a travel reimbursement. Requests for a shared hotel room and travel reimbursement must be received at least one month before and expense reports one month after the meeting. Cash prizes are also awarded for outstanding student papers. For more information, please visit: aps.org/units/fws/index.cfm

FOUR CORNERS (4CS)

4CS has established the **Harry Lustig Award** to recognize outstanding graduate-level research performed at a Four Corners institution. The annual award consists of a \$1,000 stipend, a certificate citing the contributions made by the recipient, and subsidized travel to that year's 4CS meeting. aps.org/units/4cs/awards/lustig/index.cfm

4CS provides limited travel grants for undergraduate and graduate students who attend its annual fall meeting. Students may apply for a travel grant by completing the online application form, accessed from the meeting home page.

MID-ATLANTIC (MAS)

MAS strongly encourages students to participate in its annual meetings. Students registered for a MAS meeting may request a subsidy to help offset meeting-related expenses. The number of students receiving the subsidy and the dollar amount of reimbursements will depend on available funding. Students must contact the local host organizing committee to request the subsidy. Student travel assistance is anticipated for the MAS-APS Annual Meeting and more information will be available at aps. org/units/mas/meetings several months prior to each meeting.

NEW ENGLAND (NES)

NES strongly encourages the active participation of students (undergraduates and graduates) in its meetings. Student presenters (one presenter per paper) may be reimbursed up to \$300 for registration fees, abstract publication fees, banquet tickets, hotels, meals, and travel to and from the meeting. For more information, please visit: aps.org/units/nes/awards/index.cfm

NEW YORK STATE (NYSS)

NYSS makes awards to students to help defray travel and accommodation expenses and attendance at the symposium banquet. These awards are approximately \$150 per student based on the discretion of the student support coordinator. For more information on the New York State Section funding opportunities, please see: aps.org/units/nyss/meetings/student.cfm

NORTHWEST (NWS)

NWS offers a limited number of travel awards of up to \$200 each year to enable undergraduate students to participate in the annual meeting. Priority is usually given to unsupported undergraduate and graduate students presenting a poster or a contributed paper. Awardees are expected to join the section. For more information, please visit: aps.org/units/nws/meetings/student-travel-award.cfm

Left: Attospin and channel closings in high-order above-threshold ionization by bicircular laser fields [D. B. Milošević, Phys. Rev. A **98**, 053420 (2018)].

OHIO-REGION (OSAPS)

OSAPS offers funding awards for students who plan to present either a poster or an oral presentation at one of the Section's meetings. Students may be awarded up to \$100 to assist with expenses related to attendance. For each meeting, students should apply for the award by completing the online application form, accessed from the meeting home page. For information about upcoming meetings, please visit: aps.org/units/osaps/index.cfm

SOUTHEASTERN (SESAPS)

SESAPS offers modest travel grants for undergraduate and graduate students who present a talk or poster in a SESAPS (not SPS) session and who are members of SESAPS are eligible for modest travel grants. The maximum award is \$500 to a single individual. The deadline for applications is one week after the abstract admission deadline for the annual SESAPS meeting. For further information, please visit: aps.org/units/sesaps/meetings/travel-grants.cfm. At each annual SESAPS meeting, undergraduate students chosen as recipients of the "Best Undergraduate Poster" and "Best Undergraduate Oral Presentation" awards will receive a set of the Feynman Lectures.

TEXAS (TSAPS)

The **Robert S. Hyer Research Award**, of the Texas Section, will be presented each year to two pairs of recipients. The first pair will consist of a recipient who must have been a graduate student when the research was performed, and this student's research advisor.

The second pair will consist of a recipient who must have been an undergraduate student when the research was performed, and that student's research advisor. Each recipient will receive a plaque, and the student recipients additionally will receive \$500 each.

Awards will be presented at the Fall meeting. The Texas Section has sponsored awards for outstanding presentations by both

undergraduate and graduate students. The awards can be for presentation in a regular APS oral session or an APS poster session. The awards most recently have been \$200, and typically about one award per seven presentations has been given.

TSAPS also offers student travel awards to encourage undergraduate and graduate members to make presentations at our meetings. Students should consult online meeting information for deadlines. aps.org/units/tsaps/awards/index.cfm

UPCOMING APS MEETINGS

Texas Section

March 7-9, Nacogdoches, TX

Ohio-Region Section

March 29-30, Wooster, OH

Topical Group on Hadronic Physics

April 10-12, Denver, CO

APS April Meeting

April 13-16, Denver, CO

APS Division of Laser Science (CLEO)

May 5-10, San Jose, CA

APS Northwest Section

May 16-18, Bellingham, WA

APS Division of Atomic, Molecular and Optical Physics

May 27-31, Milwaukee, WI

APS Ohio-Region Section

October 11-12, Flint, MI

APS Four Corners Section

October 11-12, Prescott, AZ

Division of Laser Science (FiO)

October 13-17, Washington DC

APS Division of Nuclear Physics

October 13-17, Crystal City, VA

APS Division of Plasma Physics

October 21-25, Fort Lauderdale, FL

Texas Section

October 25-26, Lubbock, TX

Far West Section

October 31-November1

Menlo Park, CA

APS Division of Fluid Dynamics

November 24-26, Seattle, WA

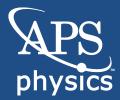
APS March Meeting 2020

March 2-6, Denver, CO

APS April Meeting 2020

April 12-21, Washington DC

Left: Spin freezing into a disordered state in CaFeTi $_2{\rm O}_6$ synthesized under high pressure [X. Li, et al., Phys. Rev. B **98**, 064201 (2018)].



FOR MORE INFORMATION PLEASE CONTACT:

American Physical Society
One Physics Ellipse
College Park, MD 20740
Phone: 301-209-3280
Fax: 301-209-0867
email: membership@aps.org
aps.org

APS Units aps.org/units