



NYSS Newsletter

October, 2026

From the Section Chair

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This year has been an exciting and challenging time for APS and for physics in general. Thank you to all of you that responded to the APS request for letters in support of the non-politicization of the NSF grant review process. I know a lot of letters were received from across the country.

The New York State Section of APS acquired many new members this year, and I hope we can continue the trend. To all our new members, welcome!

To all of our members, thank you for continuing with your membership. Please consider joining the executive committee, we can always use new ideas and viewpoints!

If you are an APS member but are not a NYSS member, please consider joining the section. You can add this to your APS membership next time you renew, or you can log into your APS account anytime and add it. There is no cost to do so, but the NYSS receives \$5 in funding from APS for each NYSS member. This helps us fund our topical symposia and our outreach projects, so please consider joining our section if you have not done so already.

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Fall 2026 Topical Symposium: Advanced Materials for Extreme Conditions,

Our next topical symposium will be held on Saturday, October 17, 2026, at the University of Rochester.

Materials operating under extreme conditions, such as high pressures, intense temperatures, strong electromagnetic fields, radiation, and other far-from-equilibrium environments, exhibit physical phenomena that are often inaccessible under ambient conditions. Understanding how materials respond, transform, and ultimately fail in these extreme conditions is central to a broad range of fundamental and technological challenges, spanning fusion energy, high-energy-density physics, aerospace and defense technologies, planetary science, quantum materials, and next-generation energy systems.

For more information and to register, please visit the meeting website at:

<https://engage.aps.org/nyss/meetings/fall-2026>

We hope to see you there!

Recent Topical Symposia

Susan DiFranzo

132nd Topical Symposium: Frontiers in Quantum Materials and Phenomena

The 132nd Topical Symposium was held on November 1, 2025 at the University at Buffalo, SUNY. The theme of the meeting was Frontiers in Quantum Materials and Phenomena. This was a continuation of the celebration of 2025 being declared the International Year of Quantum Science and Technology.

The topics of the invited talks included photonics, quantum metrology, Andreev spin qubits, topology, superlattice engineering, and many others. There was also a student poster session in the middle of the afternoon, which was well attended and demonstrated that the future of physics is in good hands.

At the end of the day, we enjoyed a banquet and reception for the winners of the student poster awards.

133rd Topical Symposium: Advances in Physics Education Research

The 133rd Topical Symposium was held on April 18, 2026 at the University at Albany, SUNY. The theme of the meeting was Advances in Physics Education Research.

The invited talks included a wide range of topics from speakers across the state. The topics included the use of CUREs (Course-based Undergraduate Research Experience), a game designed to teach quantum concepts, the culture and civic role of physics, the use of AI, student perceptions of authenticity in physics labs, as well as many others. Each talk was fascinating and I came away with some really interesting paths to pursue further.

The evening concluded with a banquet and keynote speech from Paul Cadden-Zimansky on Geometric Visualizations of Quantum States. Following the banquet was the presentation of the awards for the student poster session held earlier in the afternoon.

Upcoming Elections

The NYSS APS executive committee will be holding our biannual elections this winter. Please consider running for a member-at-large position on the committee. The position entails attending two meetings a year that coincide with the topical symposia.

Your contribution to the section would have a positive impact on our plans and outreach, as well as promoting physics across the state. If you are interested, or if you know of someone you would like to nominate, please contact the chair of the committee, Susie DiFranzo (s.difranzo@hvcc.edu).

APS Annual Leadership Meeting and Congressional Visits Day

Susan DiFranzo

In February, three members of the executive committee attended the APS Annual Leaders Meeting in Washington, DC. Susan DiFranzo, Christopher Bass, and Heather Rave attended workshops and sessions designed to enhance their skills as volunteers, network, learn from peers, and shape physics' future.

The day before the meeting, we were also given the opportunity to participate in the Congressional Visits Day. Groups of participants visited the offices of several senators and representatives to discuss topics of interest to APS. These topics included workforce development and increasing funding for research. The visits went well, and we received great feedback from the offices that we visited.

Outreach Grants

The NYSS Outreach Grants Program is funded by the NYSS-APS to provide seed money for projects intended to bring physics-related learning experiences to the general public, and in particular to K through 12 students. Funding is available for projects that will potentially lead to sustained programming and increase the participation and achievement of underrepresented groups in the sciences, mathematics, and engineering. Proposals will be accepted from individuals associated with non-profit institutions (including universities, colleges, community colleges, secondary schools, museums and other non-profits with educational missions) who intend to carry out educational activities within the area served by the NYSS-APS. For more information about applying, please visit our website at <https://engage.aps.org/nyss/resources/outreach-proposals>. Applications are accepted year-round, and decisions on awards are made biannually prior to our Fall and Spring Symposia!