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Recent Science Education Initiatives at the Princeton Plasma Physics Laboratory ANDREW ZWICKER, ARTURO DOMINGUEZ, SOPHIA GERSHMAN, NICK GUILBERT, ALIYA MERALI, DEEDEE ORTIZ, PPPL — An integrated approach to program development and implementation has significantly enhanced a variety of Science Education initiatives for students and teachers. This approach involves combining the efforts of PPPL scientists, educators, research and education fellows, and collaborating non-profit organizations to provide meaningful educational experiences for students and teachers. Our undergraduate internship program continues to have outstanding success, with 72% of our participants going to graduate school and 45% concentrating in plasma physics. New partnerships have allowed us to increase the number of underrepresented students participating in mentored research opportunities. The number of participants in our Young Women's Conference increases significantly each year. Our Plasma Camp workshop, now in its 15th year, recruits outstanding teachers from around the country to create new plasma-centered curricula. Student research in the Science Education Laboratory concentrates on the development of a high-fidelity plasma speaker, a particle dropper for a dusty plasma experiment, microplasmas along liquid surfaces for a variety of applications, an Internet-controlled DC glow discharge source for students, and a Planeterra for demonstrating the aurora and other space weather phenomenon for the general public.

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