Mission
In 2012, the National Science Foundation awarded APS 3 million in funding over the next five years to launch the American Physical Society Bridge Program, a national effort to strengthen physics in the United States by increasing the number of physics PhDs awarded to underrepresented minorities (URM) students.

- Underrepresented minority (URM) students, including African Americans, Hispanic Americans, and Native Americans, earn about 10% of US physics bachelor’s degrees, yet they comprise only about 5% to 6% of US citizens who receive physics PhDs at American institutions.
- The project will enable departments to enhance the culture of their physics graduate education so that all students have the best chance of success.

The main goal of the APS-8P is to provide students with research opportunities, advanced coursework, and mentoring, and to facilitate these students’ access to graduate programs.

I. Increase, within a decade, the percentage of physics PhDs awarded to underrepresented minority students equal the percentage of physics bachelor’s degrees granted to these groups
II. Develop, evaluate, and document sustainable model bridging experiences that improve the access to and culture of graduate education for all students, with emphasis on those underrepresented in doctoral programs in physics
III. Promote and disseminate successful program components to the physics community

Milestones
Student Recruitment
Recruitment packages are sent by graduate programs to URM students not granted admission
- Recruitment packets also sent to all other physics departments:
  - 40: 100: 50: 20: 15
- Total packages sent:
  - 725 (2016), 866 (2014)
- Advertisements (seminars, publications, websites)
- Female: 19% (2016), 33% (2014)
- URM: 53% (2014), 59% (2014)

Student Placement
Students selected as APS Bridge Fellows receive stipends to participate in programs at the newly selected bridge sites. The APS Bridge Program has surpassed its initial goals by successfully placing 14 students into bridge or graduate programs in the first year and 27 in the second.

Partnership Institutions
A coalition of academic institutions committed to increasing the educational opportunities for underrepresented minority physics students. Membership is open to all colleges, universities, non-profits, and educational organizations.

Benefits
- Membership is free
- Reduced registrations at APS-8P workshops and conferences
- Access to funding information

Member Institutions
A coalition of academic institutions committed to increasing the educational opportunities for underrepresented minority physics students. Membership is open to all colleges, universities, non-profits, and educational organizations.

Unique benefits
- Membership is free
- Access to APS-8P Bachelor student applicant database
- Access to APS-8P Master’s student applicant database
- Recognition by the APS/CGH of the department’s commitment to diversity in physics
- Recommendations for departments that have supportive post baccalaureate educational environments
- Featured on APS and APS-8P website
- Access to individuals in the project and at existing bridge sites who are knowledgeable about support strategies for URM students in graduate studies
- Strengthening Broader Impacts efforts within the department
- Limited travel support for accepted students to attend a professional meeting

Oversight
National Advisory Committee
- Brian Bond (Duke, APS President 2007)
- Victoria Ososkey (UA)
- Ximena Fernández (Columbia Grad Student)
- Theodore Hodapp (APS, Project Dir.)
- Casey Miller (USF)
- Anthony Johnson (UMBC)
- Andreas Bill (CSULB)
- Cherry Murray, (Harvard, APS President 2009)
- Paul Gueye (President, NSBP)

Architects Council
- Shafique Durrani(UCB)
- Caprice Kendall (UCB)
- Craig Wilcoxon (UCB)
- Dave Manoogian (UCB)
- Ryan J. Gordon (UCB)
- Ximena Fernández (Columbia Grad Student)
- Brian Bond (Duke, APS President 2007)
- Victoria Ososkey (UA)
- Theodore Hodapp (APS, Project Dir.)

Management
- Brian Bond (Duke, APS President 2007)
- Theodore Hodapp (APS, Project Dir.)
- Bushraa Khatib (APS, Project Coord.)
- Anthony Johnson (UMBC)
- Andreas Bill (CSULB)
- Cherry Murray, (Harvard, APS President 2009)
- Theodore Hodapp (APS, Project Dir.)

Summary and Outlook
The Ohio State University
OSU established a one- to two-year transitional M.S. program that began in summer 2013. The APS-8P Fellows enter OSU’s existing physics M.S. program, and are on track to apply to a physics doctoral program there or at another institution.

Student placements are the applications for graduate school.

APS Bridge Sites
University of South Florida
The University of South Florida in Tampa admits Bridge Fellows as master’s students into a hybrid post-baccalaureate/ transitional master’s program. Students will initially be appointed as research interns at the National High Magnetic Field Laboratory (MagLab) in Tallahassee in the summer prior to enrollment. In their first year, students can enroll in advanced undergraduate courses or may enroll in the corresponding core graduate courses, depending on their level of preparation.

Admission Decisions
Each Bridge Site uses its own admission criteria (APS verifies eligibility). The Physics GRE is not used in admission decisions. Instead, APS Bridge Sites are encouraged to use non-traditional assessments such as Self-assessment, Résumés self-appraisal, Letter of goals, and Gr. Students may be asked to formally apply to the APS Bridge Sites graduate schools.

Florida State University
The Department of Physics at Florida State University (FSU) has established a program to bridge students from Under-Represented Minorities (URM) in Physics to a PhD program at FSU or elsewhere. Students will initially be appointed as research interns at the National High Magnetic Field Laboratory (MagLab) in Tallahassee in the summer prior to enrollment. In their first year, students can enroll in advanced undergraduate courses or may enroll in the corresponding core graduate courses, depending on their level of preparation.

Admission Decisions
Each Bridge Site uses its own admission criteria (APS verifies eligibility). The Physics GRE is not used in admission decisions. Instead, APS Bridge Sites are encouraged to use non-traditional assessments such as Self-assessment, Résumés self-appraisal, Letter of goals, and Gr. Students may be asked to formally apply to the APS Bridge Sites graduate schools.

California State University, Long Beach
CSULB offers a bridge to the PhD through their Master’s degree program. As an APS Bridge Site they aim to increase the number of URM students entering a PhD program by increasing a solid academic education in conjunction with practical research training in an environment of personalized guidance conducive to empower students to pursue their dreams. Between 2011 and 2013, 13 students (3 URM) from CSULB’s BS program were admitted into doctoral schools across the United States.

Research Topics
- White papers on graduate admissions practices
- 89% response rate from doctoral institutions
- 75% response rate from Master’s institutions
- Paper: a user-friendly guide to writing successful applications for graduate programs
- Understanding modes of failure in graduate school
- Developing practical tools to bring non-cognitive variables into graduate admissions
- Student interpretation of admissions process

Student Placements
Students selected as APS Bridge Fellows receive stipends to participate in programs at the newly selected bridge sites. The APS Bridge Program has surpassed its initial goals by successfully placing 14 students into bridge or graduate programs in the first year and 27 in the second.

Graduate Admission Physics GRE Impact of Candidate Scores
- Male (N = 500)
- Female (N = 500)
- 90% response rate from doctoral institutions
- 75% response rate from Master’s institutions
- Paper: a user-friendly guide to writing successful applications for graduate programs
- Understanding modes of failure in graduate school
- Developing practical tools to bring non-cognitive variables into graduate admissions
- Student interpretation of admissions process

American Physical Society Bridge Program
Enhancing Diversity in Graduate Education
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