Engaging and Serving Physicists Worldwide

**International Activities: Challenges & Opportunities** 

Jonathan Bagger American Physical Society July 25, 2022



Mission & Values

#### **APS Mission**

... To advance and diffuse the knowledge of physics for the benefit of humanity, to promote physics, and to serve the physics community ... [since 1899]

#### **APS Values**

- The Scientific Method
- Truth and Integrity
- Diversity, Inclusion, and Respect
- Partnering, Cooperation, and Open Collaboration
- Speaking Out
- Education and Learning

Many dimensions!

Activities & Priorities, consistent with Mission & Values

#### **APS Activities**

Advance & Advocate. Communicate & Collaborate. Convene & Disseminate. Enable & Include. Inspire & Integrate. Lead & Listen. Partner & Prod ....

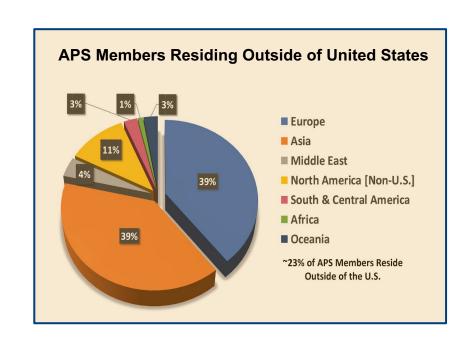
#### **APS Priorities**

- Strengthen scientist-to-scientist connections by
  - Hosting meetings (March, April, DPF, Snowmass ...)
  - Fostering communication (U.S.-China, Global Physics Roundtable ...)
  - Speaking out (China Initiative, Russia ...)
  - Ensuring mobility (Visas, Ukraine ...)
- We are one international physics community!



International Engagement

- APS membership
  - Nearly 1/4 of the 50,000 APS members live outside the U.S.
- APS meetings
  - Close to 1/3 of the 13,500 March Meeting attendees come from outside the U.S.
  - Hybrid and satellite meetings enable more international participation
- APS journals
  - Over 85% of published articles have a non-U.S. author or co-author



Example: Science Diplomacy

#### U.S. – China Physics Roundtable

- Face-to-face dialogue among small high-level group, with members from Chinese Academy of Sciences, China Association of Science and Technology, U.S. National Academy of Sciences
- Open conversations about challenges to cooperation. Follow-on discussions with U.S. government

#### Global Physics Roundtable

- Virtual summit of leaders of national physics societies
  & other international organizations to discuss shared interests and concerns
  - Physics and Society: "The Role of Physics in the Green Economy"
  - Physics and Policy: "Research Security"







Example: Scientific Mobility

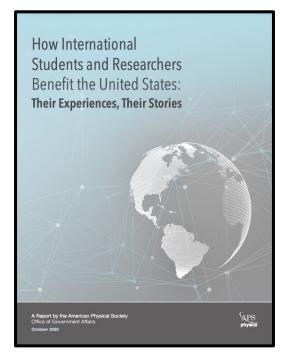
- BUT we can't convene global communities and welcome physicists worldwide if they can't get visas to come to the United States!
- APS advocates for visa policies that enhance scientific mobility
- Our message is simple
  - Physics across the globe advances physics in the U.S.
  - Physics in the U.S. advances physics across the globe
  - International collaboration advances physics worldwide



Example: Scientific Mobility

International students and researchers: Why they come, how they come, and what they provide to the United States

- APS asked international members to share their stories on the importance of international mobility and scientific visas
  - Received more than 100 personal letters ranging from students and early career physicists to professors and Nobel laureates
- Their stories help APS to influence U.S. policymakers
  - Foreign-born inventors account for 23% of all U.S. patents since 1976
  - Since 2000, 38% of all U.S. Nobel laureates have been foreign-born
  - As of 2018, immigrants had founded > 50% (50 of 91) of U.S. privately-held billion-dollar startup companies; 21 first came on J-1 visa



Personal Stories and Statistics www.aps.org/policy/analysis/



## **American Physical Society**Outlook

# Going forward: APS will continue to convene and connect the global physics community

- Continue U.S.-China discussions
  - Identify mutually beneficial joint projects
  - Address areas of regulatory and security concerns that emerge
- Host Global Physics Roundtable
  - Agree on principles regarding research security
  - Explore establishing a standing body a "P20" for physics society conversations
    - Global Physics Society Roundtable?
- Advocate for international scientific mobility. We need your help!
- Reinforce historical U.S. role as a welcoming hub for the global physics community



FYI: Visa Resources

## **APS Visa Website**

https://www.aps.org/programs/international/visa/

- Visa Information Learn about the visa application process, obtain information about visa interviews, and more
- Visa Help What to do if your visa application is delayed and tips to avoid problems
- Traveling Abroad from the United States Information for U.S. citizens and noncitizens traveling to meetings outside of the United States
- Visa Processing Estimated wait times for visa processing at Consular Offices worldwide

