



URA Honorary Awards

Fermilab 57th Annual Users Meeting
July 10-12, 2024

URA President
John Mester

URA UNIVERSITIES
RESEARCH
ASSOCIATION

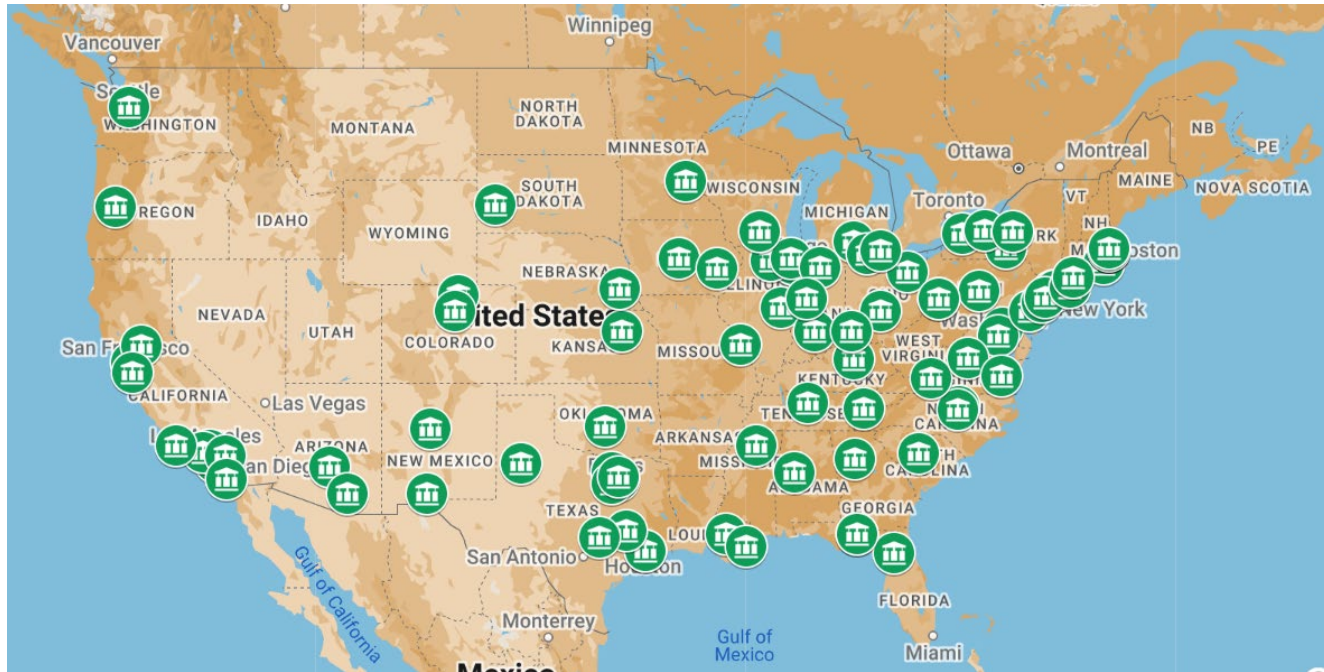
Universities Research Association (URA)

The Mission of URA

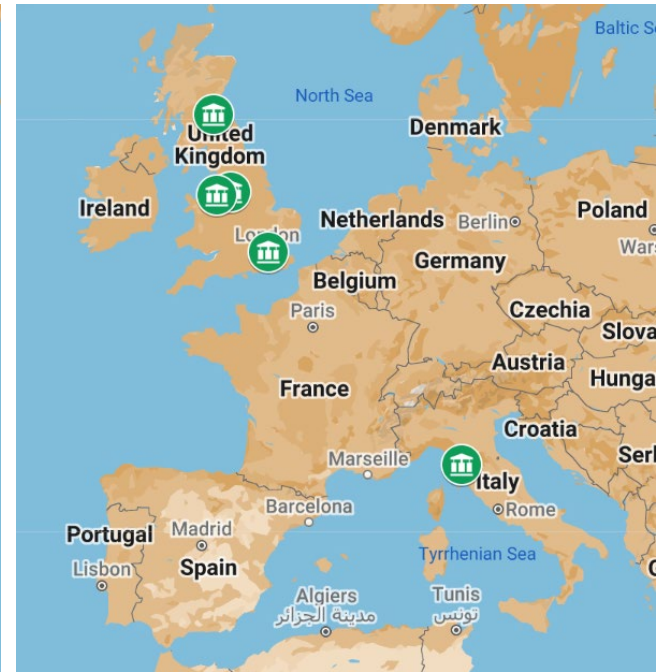
Establish and operate unique laboratories and facilities for research, development, and education in the physical and biological sciences to expand the frontiers of knowledge, foster innovation, and promote the education of future generations of scientists.

- Non-profit consortium of 93 leading research universities throughout the U.S. and in UK and Italy
- Founded in 1965 at the behest of the National Academies of Sciences to ensure the proposed National Accelerator Laboratory would have nationwide representation in management and oversight
- URA built and managed Fermilab and in 2007 joined with UChicago to form the Fermi Research Alliance (FRA) so that Fermilab would have both a strong national and regional presence

URA as Membership Organization



United States of America



United Kingdom & Italy

URA Programs Portfolio

URA FRA

- Honorary Awards
- Undergraduate Women in STEM
- Visiting Scholars Program (VSP)
- Users Community Congressional DC Visit
- Fermilab Users & Affiliates Annual Meeting

Global

- Pierre Auger Cosmic Ray Observatory

URA SANDIA

- National Technology and Engineering Solutions of Sandia (NTESS)
- Sandia Graduate Student Summer Fellowship
- Future Directions Workshops

URA HQ

- STEM Policy & Advocacy for Research Competition (SPARC)
- GEM Consortium Partnership for Graduate Opportunities

URA-Fermilab Undergraduate Women in STEM

Warm welcome to the 2024 Summer Cohort



Alanice Agosto Reyes
University of Puerto Rico,
Mayaguez
Astronomy/Physics



Angelica Trillo
University of New Mexico
Mechanical Engineering



Shade Teriba
Hampton University
Physics



Cristy Rosado Bonilla
University of Puerto Rico,
Mayaguez
Theoretical Physics



Jeanette Simo
University of California,
Davis
Applied Physics



Rebecca Gonzalez
San Diego City College
General Engineering

URA-Fermilab Undergraduate Women in STEM



Program Pillars

Maintaining a forward-looking science and technology laboratory portfolio



Eligibility

1. Women science and engineering majors from under-represented groups
2. Academic Disciplines
 - Engineering
 - Material Science
 - Physics
 - Mathematics
 - Chemistry
 - Computer Science

Performance Period

July – August, 10 weeks

<https://ura-hq.org/fellowships-awards/undergraduate-in-stem/>



- Particle Physics
- Accelerators
- Applied Physics & Superconducting Technology
- Computational Sciences
- Emerging Technologies

Mission Driven Research

This summer internship program brings a diverse cohort of young women to work on mission-driven research at Fermilab.



Photo: U.S. Department of Energy, Forrester Building, Washington, DC, June 25, 2024

URA Science Policy Day - DC

Fermilab and URA empower future young leaders through science policy engagements, to learn about the processes that enable the great work being done at Fermilab and the other Department of Energy's national laboratories.

U.S. High Energy Physics Users Community DC Visit

April 9-11, 2024

HEP Community meets with U.S. Congress members and Administration officials

- 69 participants in person
- 397 meetings with Senate and House Offices, Appropriations Committee Staff, National Science Foundation, White House Office of Management and Budget, U.S. Department of State



URA Honorary Awards Program

For the past 27 years, URA has honored outstanding research achievements from Fermilab's scientists and engineers.

Doctoral Thesis Award

Honors the most outstanding doctoral thesis written on research conducted at Fermilab or in collaboration with Fermilab scientists

Tollestrup Award for Postdoctoral Research

For outstanding doctoral thesis written on research conducted at Fermilab or in collaboration with Fermilab scientists



Early Career Award

For outstanding work conducted by an early career researcher at Fermilab or benefiting the Fermilab scientific program

Engineering Award

Honors outstanding work in engineering or engineering physics that was conducted at Fermilab or in collaboration with Fermilab scientists

Fermilab Annual Users & Affiliates Meeting

The culmination of this recognition occurs at the Annual Users Meeting.

Each awardee receives \$10,000 from URA and presents the work at the meeting.



56th Fermilab Annual Users Meeting (2023)

Users advance, amplify, and broaden the mission of Fermilab, by bringing diverse expertise, collaborating on projects and experiments, and contributing to the reputation of the laboratory as the national center for groundbreaking research in particle physics.

URA Honorary Award Committees

Early Career Award

Cecilia Gerber, University of Illinois Chicago, Chair
Pedro Machado, Fermilab, Co-Chair
Juan Estrada, Fermilab
Elisabeth Krause, University of Arizona
Lindsey Gray, Fermilab
Stoyan Stoynev, Fermilab

Doctoral Thesis Award

Chris Stoughton, Fermilab, Chair
Phil Adamson, Fermilab
John Campbell, Fermilab

Tollestrup Award for Postdoctoral Research

Michael Mulhearn, University of California-Davis, Chair
Jahred Adelman, Northern Illinois University, Co-Chair
Brenna Flaugher, Fermilab
Andreas Kronfeld, Fermilab
Matthew Toups, Fermilab

Engineering Award

Jamieson T. Olsen, Fermilab, Chair
Mayling L. Wong-Squires, Fermilab, Co-Chair
Tug Arkan, Fermilab
Maria Barba, Fermilab
Silvia Zorzetti, Fermilab
Gustavo Cancelo, Fermilab
Matthew Hollister, Fermilab



2024 URA Honorary Awards

Recognitions & Presentations



Tollestrup Award For Postdoctoral Research

(virtual)

Ana Martina Botti

Fermi National Accelerator Laboratory

"For highly impactful contributions to detector R&D and operations of the SENSEI(Sub-Electron-Noise Skipper-CCD Experimental Instrument)/OSCURA(Observatory of Skipper CCDs Unveiling Recoiling Atoms) Experiment, including an order of magnitude reduction in dark current which has been critical to the experimental sensitivity."



Doctoral Thesis Award

Brynn Kristin MacCoy

University of Washington

"Dr. MacCoy's thesis asks significant questions: 'What is the measurement, really?' 'What could affect the answer?' 'How well do we really know these assumptions?' The answers serve as reference to the physics community, especially the clear and approachable introduction to beam dynamics. The conclusions give a clear sense of the impact of this work on the wider physics community and clearly describe future experimental and theoretical work."



Early Career Award

Kevin Pedro

Fermi National Accelerator Laboratory

“For groundbreaking searches for dark matter arising from strongly coupled dark sectors with the CMS detector, pioneering work in ML-based model-independent anomaly detection for collider and astrophysics experiments, and leadership in the development of new AI/ML techniques to improve event reconstruction and detector simulation in particle physics, as well as novel strategies to accelerate AI inference and throughput with heterogeneous computing using coprocessors as a service.”



Engineering Award

William Pellico

Fermi National Accelerator Laboratory

"Bill Pellico has led the development of innovative Power-over-Fiber (PoF) readout electronics for the Photon Detection System of the DUNE Far Detector. The challenge of delivering power to the photon detectors placed on the -300 kV cathode surface of the liquid argon time projection chamber (LArTPC) has been met thanks to his foresight and creativity, and this development underpins the expanded neutrino physics reach of the DUNE Far Detector (FD2). This achievement is a highlight among many throughout Bill Pellico's career, including his multiple engineering and leadership contributions to increasing the proton throughput of the accelerator complex that have been crucial to the successes of the Fermilab neutrino program, and his recent pursuit of the development of robotic systems to enable safer and more efficient maintenance of detectors and accelerators."



*Congratulations
2024 Awardees!*



*Thank you,
John Mester and URA*

