

FermiFusion Workshop: Uniting Minds for Scientific Advancement August 5 - 7, 2024

Closed-toe flat shoes must be worn for tours.

Monday, August 5

12:00 - 4:45 pm Arrival O'Hare Airport *Transportation times to hotel will vary by individual

Hotel Hyatt Place 27576 Maecliff Drive, Warrenville, IL 60555 630-836-9800

5:30 - 7:00 pm (Optional) Maggiano's Little Italy \$\$ <u>Freedom Commons | Maggianos.com</u> 1847 Freedom Dr, Naperville, IL 60563 Sandra Charles, Chief Equity, Diversity, Inclusion and Accessibility Officer Anahi Ruiz Beltran, Diversity & Inclusion Specialist - Climate, Culture and Belonging Cortez Watkins, Senior Workforce Pathways and Partnerships Liaison Kaitlyn Anderson, Diversity & Inclusion Specialist - Communications and Analytics

*No Host Dinner: Attendees cover their own meal and transportation costs.

Tuesday, August 6

- 7:30 8:00 am Arrival at Fermilab Badge Pick-Up Batavia Road Entrance from Route 59
- 8:20 am Welcome and Introductions Group photo Wilson Hall (WH), Atrium, enter through front doors on horseshoe
- 8:45 am Brief History of Fermilab Valerie Higgins, Laboratory Archivist
- 9:00 am Board Shuttle Wilson Hall (WH), Horseshoe

9:15 - 10:15 am Fermilab Campus - Riding Tour

- 10:15 am Coffee Break WH2 Crossover
- 10:30 -10:35 am Safety Message Curia II, WH2 SW Azariah Israel, Environment, Safety & Health Specialist Specialist, ES&H

Emerging Technologies

Curia II, WH2 SW

10:35 - 11:00 am Artificial Intelligence and Machine Learning Jennifer Ngadiuba, PhD, Associate Scientist, AI for High Energy Physics, PPD

Quantum Science and Technology

- 11:05 11:25 am **Theory of Quantum** Henry Lamm, PhD, Associate Scientist, Quantum Theory Dept., PPD
- 11:30 11:50 pm Working with Faculty and Students at Magnet Systems Department Stoyan Stoynev, PhD, Scientist, Magnet Systems Dept., APSTD
- 11:50 12:10 pm Quantum Science/Technology and Magnets Panel Session

Donovan Tooke, Operations Specialist, Accelerator Operations Dept., AD Doga Kurkcuoglu, PhD, Associate Scientist, Co-Design and Algorithms Dept., SQMS Stoyan Stoynev, PhD, Scientist, Magnet Systems Dept., APSTD Henry Lamm, PhD, Associate Scientist, Quantum Theory Dept., PPD Tanay Roy, PhD, Associate Scientist, 3D Quantum Systems Dept., SQMS

- 12:15 12:30pm Break
- 12:30 1:30pm Lunch & Deep Underground Neutrino Experiment Presentation Curia II-WH2 SW Stephen Brice, PhD, Head, DUNE Coordination Office
- 1:45 2:00 pm **RENEW and FAIR Funding Opportunities** Curia II, WH2 SW Amanda Early, STEM Ambassador, OEDIA Jacqueline Smith, PhD, AAAS Science & Technology Fellow, Department of Energy
- 2:15 2:55 pm **FACULTY: Proposal Writing and Collaboration** with Fermilab Researchers WH15 Floor, Crossover S Robert Ainsworth, PhD, Scientist, Beams Division, AD Sudeshna Ganguly, PhD, Associate Scientist, Beams Division, AD Tia Miceli, PhD, CompSci Researcher, Accelerator Complex Technology Division, AD Stephen Brice, PhD, Head, Fermilab DUNE Coordination Office Bo Jayatilaka, PhD, Senior Scientist, SCSSD Angela Fava, PhD, Scientist, Neutrino Physics Division, PPD Henry Lamm, PhD, Associate Scientist, Theory Division, PPD Minerba Betancourt, PhD, Scientist, Neutrino Division, PPD Nathan Saffold, PhD, Research Associate, Particle Astrophysics Division, PPD Jeremiah Holzbauer, PhD, Scientist, Quantum Division, SQMS

STUDENTS: Fermilab Summer Interns Meet & Greet with Fermilab Summer Interns Comitium, WH2 SE

Adam Rouzky, Duke University, SIST Adamo Mvuezolo, Kirkwood Community College, SIST Albert K. Szewczyk, Harper College, CCI Aya Labnine, SUNY at Binghamton, SIST Brianna Dewey, University of Notre Dame, SIST Grace M. Gibbins, University of Arizona, SULI Jason K. Osei-tutu, Wilbur Wright College, CCI Justin L. Wheeler, Carthage College, SULI Kateryna Havryshchuk, Amherst College, SIST Leopoldo J. Ruffolo, Marquette University, SULI Lorenzo Unich, Italian Student Program, University of Naples Federico II Matteo Marchisio Caprioglio, Italian Student Program, University of Turin Nadia M. Talbi, University of Wisconsin-Madison, SIST Samriddhi Bhatia, University of Illinois at Urbana-Champaign, SIST

2:55 pm Board Shuttle to IARC Wilson Hall (WH), Horseshoe

3:20 - 4:20 pm **Tours** *Close-toed, flat shoes MUST be worn for tour

Quantum Garage

IARC

Doga Kurkcuoglu, PhD, Associate Scientist, Co-Design and Algorithms Dept., SQMS

Material Science Lab (MSL)

Industrial Center Building Akshay Murthy, PhD, Associate Scientist, Qubits and Materials Dept., SQMS

4:30 - 4:45 pm Break

4:45 - 5:25 pm Meet & Greet - Fermilab Laboratory Resource Groups

Wilson Hall (WH) Cafeteria Aisha Ibrahim, Senior Engineer, fSWE Andres F. Quintero Parra, Staff Engineer, HLF Carly R. Kurr, Legal Operations Specialist, FACts, Chandler Lawrence, Computing Services Specialist, Veterans Finley Novak, Staff Engineer, Spectrum Genfa Wu, Senior Scientist, FAPA Japheth Hayman, Engineer, AABA Josephine Fazio, Computing Project Manager, WI Josephine Paton, Research Associate, FACts Latasha Johnson, Procurement Manager, AABA Lymarie Munoz, Environment, Safety & Health Specialist. HLF Miguel Gutierrez, Area Facilities Manager, Veterans Mohammed Elrafih, Project Controls Manager, FYP Pete Cholewinski, Compensation Analyst, Spectrum Roshanda Spillers, Computing/IT Associate, FYP Sudeshna Ganguly, Associate Scientist, FAPA Valerie Higgins, Knowledge Distribution Group Leader, WI

AABA: African American / Black Association FACts: Fermi Accessibility Communities FAPA: Fermi Asian Pacific Association fSWE: Fermilab Society of Women Engineers FYP: Fermilab Young Professionals HLF: Hispanic/Latino Forum Spectrum: LGBTQ+ Community WI: Women's Initiative 5:25 pm Departure to Hotel Gather at Ground Floor in Wilson Hall (WH)

Dinner on Your Own: Attendees arrange own dinner and evening transportation

REMINDER: Hotel checkout, morning of Wednesday, August 7th. Bring luggage to OEDIA Office, WH15E.

Wednesday, August 7

- 7:30 8:00 am Arrival at Fermilab Wilson Hall (WH) WH, 15E, OEDIA - Luggage Drop-off
- 8:20 8:35 am Education and Public Engagement at Fermilab WH, Atrium - Gather in Cafeteria on West Side Natalie Johnson, PhD, Head, Office of Education and Public Engagement (EPE)
- 8:40 8:55 am Integrated Engineering Research Center (IERC) Tour WH, Atrium - Gather near Security Desk in Atrium Trevor Nichols, Senior Engineer, Electrical Engineering Dept., PPD

Fermilab Flagship Projects

Curia II-WH2 SW

- 9:00 9:20 am **Proton Improvement Plan II (PIP-II)** Arden Warner, PhD, Senior Engineering Physicist, Proton Source Dept., AD
- 9:30 9:50 am Compact Muon Solenoid Collaboration (CMS) Frank Chlebana, PhD, Senior Scientist, Collider Physics Division, PPD
- 10:00 10:20 am **Sustainability at Fermilab** Curia II, WH2 SW

Catherine Hurley, Sustainability Manager, ISD Alyssa Rodway, Environment, Safety & Health Specialist, ISD Shivani Saikar, Senior Engineer, ISD

- 10:30 -10:45 am Coffee Break WH2 Crossover
- Office of Science Workforce Development Programs Curia II-WH2 SW 11:00 - 11:20am Visiting Faculty Program (VFP) Kathrine Laureto, Mechanical Engineer, AD & VFP Lead

Andy C. Y. Li, PhD, Applications Physicist, Quantum Algorithms & Theory Applications, ETD 11:30 - 11:50 pm Science Undergraduate Laboratory Internship (SULI) Community College Internship (CCI) Minerba Betancourt, PhD, Scientist, Neutrino Division, PPD & SULI Program Lead Talia Saarinen, current SULI Intern Terry Kim, past SULI Intern Wes Winter, former CCI Intern

- 12:00 pm Lunch & Workshop Evaluation with OEDIA Staff WH,15 Floor Crossover S
- 12:50 pm Closing Remarks WH,15 Floor Crossover S

1:15 - 2:45 pm Intern Poster Session (Connect with potential Collaborators - Orange Name Tags) WH, Atrium

> Andy C. Y. Li, PhD, Applications Physicist, Quantum Division, SQMS Angela Fava, PhD, Scientist, Neutrino Physics Division, PPD Catherine Hurley, BCE, Sustainability Manager, Infrastructure Services Division, ISD Daniel Bowring, PhD, Scientist, Quantum Division, SQMS Frank Chlebana, PhD, Senior Scientist, Collider Physics Division, PPD Henry Lamm, PhD, Associate Scientist, Theory Division, PPD Jeremiah Holzbauer, PhD, Senior Scientist, PIP-II Division, PIP-II Kavin Ammigan, PhD, Senior Engineer, Beams Division, AD Minerba Betancourt, PhD, Scientist, Neutrino Division, PPD Robert Ainsworth, PhD, Scientist, Beams Division, AD Sudeshna Ganguly, PhD, Associate Scientist, Beams Division, AD Tia Miceli, PhD, CompSci Researcher, Accelerator Complex Technology Division, AD

3:00 pm Workshop Close

WH, 15E Floor - Office of Equity, Diversity, Inclusion and Accessibility Collect Luggage

3:30 pm Departure for O'Hare Airport

WH, Ground Floor - West Entry Board transportation to airport

AAAS	American Association for the Advancement of Science
AD	Accelerator Directorate
APSTD	Applied Physics and Superconducting Technology Directorate
CCI	Community College Internships (CCI)
DUNE	Deep Underground Neutrino Experiment
ESH	Environment, Safety and Health Division
ETD	Emerging Technologies Division
ISD	Infrastructure Services Division
OEDIA	Office of Equity, Diversity, Inclusion and Accessibility
PIP-II	Proton Improvement Plan-II
PPD	Particle Physics Directorate
SCSSD	Scientific Computing Systems and Services Division
SIST	Summer Internships in Science & Technology
SQMS	Superconducting Quantum Materials and Systems Center
SULI	Summer Undergraduate Laboratory Internship (DOE)
VFP	Visiting Faculty Program (DOE)