



Physics in Intense Fields Conference (PIF26)

Monday, July 20 – Friday, July 24, 2026

University of Rochester, Feldman Ballroom, Rochester, NY



University
of Rochester

AGENDA

Monday, July 20 | Day 1

8:00 – 8:50	Registration
8:50 – 9:00	Welcome
Morning/Afternoon session:	High-Intensity Laser Facilities
9:00 – 9:45	Elizabeth Hill, <i>University of Rochester</i>
9:45 – 10:30	Kyung Taec Kim, <i>Institute for Basic Science</i>
10:30 – 11:00	Coffee break
11:00 – 11:45	Sebastian Meuren, <i>Ecole Polytechnique</i>
11:45 – 13:30	Lunch
13:30 – 14:15	Paul Campbell, <i>University of Michigan</i>
14:15 – 16:30	Poster session
16:30 – 18:00	Welcome reception

Tuesday, July 21 | Day 2

Morning session:	Experimental Progress
9:00 – 9:45	Sebastien Corde, <i>Ecole Polytechnique, LOA</i>
9:45 – 10:30	Eva Los, <i>University of Oxford</i>
10:30 – 11:00	Coffee break
11:00 – 11:45	Elias Gerstmayr, <i>Queen's University Belfast</i>
11:45 – 13:30	Lunch
Afternoon session I:	Pair Production and QED Cascades
13:30 – 14:15	Hidetoshi Taya, <i>Keio University</i>
14:15 – 15:00	Mickael Grech, <i>Laboratoire pour l'Utilisation des Lasers Intenses, CNRS</i>
15:00 – 15:30	Coffee break
Afternoon session II:	Contributed Talks
15:30 – 16:00	Joshua Luoma, <i>Cornell University</i>
16:00 – 16:30	Sarah Jane Grimm, <i>TU Darmstadt</i>
16:30 – 17:00	Elizabeth Breen-Lee, <i>Old Dominion University</i>
17:00 – 17:30	Caleb Joseph Redshaw, <i>Stanford University</i>

Wednesday, July 22 | Day 3

Morning session: Quantum Effects Involving Low-Energy Photons and Gravitons

9:00 – 9:45 Felix Karbstein, *Helmholtz Institute Jena*

9:45 – 10:30 Lilly Zhang, *University of Oxford*

10:30 – 11:00 Coffee break

11:00 – 11:45 Sonja Klisch, *Perimeter Institute for Theoretical Physics*

11:45 – 13:30 Lunch

Afternoon session: Gamma Flashes

13:30 – 14:15 Marta Galbiati, *Laboratoire pour l'Utilisation des Lasers Intenses, CNRS*

14:15 – 15:00 Vojtěch Horný, *ELI NP*

15:15 – 18:00 Departure from Rush Rhees Library for the tour of the Laboratory for Laser Energetics (LLE)

18:00 – 20:00 Reception and dinner at the LLE

Thursday, July 23 | Day 4

Morning session: Radiation and High-Intensity Light-Matter Interaction

9:00 – 9:45 Matteo Tamburini, *Max Planck Institute for Nuclear Physics*

9:45 – 10:30 Martin Stack Formanek, *ELI Beamlines*

10:30 – 11:00 Coffee break

11:00 – 11:45 Yuan Shi, *University of Colorado Boulder*

11:45 – 13:30 Lunch

Afternoon session: Ultra-High Fields and the Ritus-Narozhny Conjecture

13:30 – 14:15 Henri Vincenti, *CEA*

14:15 – 15:00 Brandon Russell, *Princeton University*

15:00 – 17:30 Coffee break/ Poster session

Friday, July 24 | Day 5

Morning session: Contributed Talks

9:30 – 10:00 Joao Maria Afonso Custodio, *ELI Beamlines*

10:00 – 10:30 Ivan Ahumada, *University of Plymouth*

10:30 – 11:00 Coffee break

11:00 – 11:45 Community feedback and closing remarks

11:45 – 12:30 Grab & Go boxed lunches

SPEAKER	TITLE
Elizabeth Hill	NSF OPAL: Reaching for the Brightest Light
Kyung Taec Kim	Nonlinear Compton scattering experiments with the quantum nonlinearity parameter larger than 1
Sebastian Meuren	TBD
Paul Campbell	Progress toward flagship experiments at ZEUS
Sebastien Corde	Extreme focusing and strong-field QED using petawatt electron and laser beams
Eva Los	Observation of quantum effects on radiation reaction in strong fields
Elias Gerstmayr	Experimental demonstration of Flying-Focus enhanced Thomson scattering
Hidetoshi Taya	PIC simulation of the Schwinger effect
Mickael Grech	Electromagnetic showers as a path to pair plasmas in the lab
Joshua Luoma	Non-linear Inverse Compton Scattering for High-Field and HED Science
Sarah Jane Grimm	Recent Experimental Progress of E320 at FACET-II
Elizabeth Breen-Lee	A Flat-Pulse Analytic Framework for Modeling Inverse Compton Scattering and Ponderomotive Broadening
Caleb Joseph Redshaw	Laser self-focusing and collapse at ultra-high intensity
Felix Karbstein	Dark-field Concept for the Measurement of Light-by-Light Scattering Signals at EuXFEL
Lily Zhang	Angular Momentum as a Powerful Probe for Photon-photon Scattering
Sonja Klisch	Soft theorems in plane wave backgrounds
Marta Galbiati	Gamma-photon generation with near-critical foam-based targets at the Apollon multi-PW laser
Vojtěch Horný	Plasma-based inverse Compton gamma sources at multi-PW laser intensities
Matteo Tamburini	Intrinsic Nonlocality of Spin- and Polarization-Resolved Probabilities in Strong-Field Quantum Electrodynamics
Martin Stack Formanek	Classical and Quantum Radiation from Ultrarelativistic Particles
Yuan Shi	Kinetic simulations of relativistic-quantum plasmas using real-time lattice scalar QED
Henri Vincenti	Reaching the strong-field QED regimes with plasma mirrors: new developments
Brandon Russell	Using XUV laser light to study the breakdown of perturbative strong-field QED
Joao Maria Afonso Custodio	Coherent radiation and radiation friction in laser-plasma collisions
Ivan Ahumada	Worldline multi-photon scattering in strong background fields

POSTER PRESENTER	TITLE
Charlie Arrowsmith	Dephasingless laser wakefield acceleration using a flying focus
Matthew Barczys	NSF OPAL Data Sharing and Artificial Intelligence
Elizabeth Breen-Lee	A Flat-Pulse Analytic Framework for Modeling Inverse Compton Scattering and Ponderomotive Broadening
Thomas De Vos	Strong-field QED kinetic theory
Adrian Hosak	Polarization-operator correction to strong-field QED processes
Michael Krieger	NSF OPAL Target Bay and Experimental Systems
Isabelle LaBelle	Optimizing Positron Converter and Particle Spectrometer Shielding Design Using FLUKA Simulations
Joshua Luoma	Non-linear Inverse Compton Scattering for High-Field and HED Science
Rohan Mahnot	TBD
Kyle McMillen	Enhancement of laser filamentation by additional speckled laser beams
Shawn McPoyle	Progress on the Development of the BHx: A High Throughput, Sub-Picosecond Streak Camera in Development at LLE
Olivia Ocker	Initial Test of the Ten-Inch Manipulator-Based Short Lived Isotope Counting System
Md Reshad Ur Rahman	Strong-Field QED and Nonlinear Breit-Wheeler Pair Production in Flying-Focus Pulses
Anthony Raymond	Towards Focal Volume Characterization via Ponderomotive Electron Ejection
Caleb Redshaw	Laser self-focusing and collapse at ultra-high intensity
Emerson Rogers	Towards a Realistic Quantum Model for Laser-Wakefield-Driven Inverse Compton Sources
Carlos Javier Servin Tomas	Photon-dressed fermion line in the worldline formalism
Dante Vara	Measurement of deuteron- and proton-induced lithium reaction cross sections for SLICS detector efficiency calibration