2024 APS/CNM Users Meeting Schedule at a Glance

Plenary and Workshops Locations Listed at Bottom

Monday, May 6, 2024	
7:30	Registration Open (Atrium Lobby)
7:30	Welcome Coffee Event (Atrium)
8:00-5:00	Exhibits (Atrium & Lower Level Gallery)
Combined APS & CNM Plenary Session	
8:30-8:35	Mingda Li, Vice-chair, APS Users' Executive Committee (Massachusetts Institute of Technology) Welcome and Launch of the 2024 APS/CNM Users Meeting
8:35-8:45	Paul K. Kearns, Laboratory Director (Argonne National Laboratory) Welcome from the Laboratory
8:45-8:50	Laurent Chapon, Associate Laboratory Director, Photon Sciences (Advanced Photon Source, Argonne National Laboratory) Introduction of DOE Speaker Linda Horton
8:50-9:15	Linda Horton (Basic Energy Sciences, Department of Energy) The DOE Perspective
9:15-9:20	Ilke Arslan, Division Director (Center for Nanoscale Materials and the Nanoscience and Technology Division, Argonne National Laboratory) Introduction of Keynote Speaker Jessica Wade
9:20-10:10	Keynote Address: Jessica Wade (Imperial College London) Chiral Materials and Changing Research Culture
10:10-10:35	Break (Atrium)
10:35-10:55	Laurent Chapon, Associate Laboratory Director, Photon Sciences (Advanced Photon Source, Argonne National Laboratory) APS Update
10:55-11:15	Ilke Arslan, Division Director (Center for Nanoscale Materials and the Nanoscience and Technology Division, Argonne National Laboratory) CNM Update
11:30-1:30	Lunch at Argonne Guest House (Shuttle available)
APS Plenary Session	
1:15-1:20	Mingda Li, Vice-chair, APS Users' Executive Committee (Massachusetts Institute of Technology) Welcome and Announcement of the 2024 Gopal K. Shenoy Excellence in Beamline Science Award Winner: Denis T. Keane (DND-CAT, Northwestern University)
1:20-2:00	Yuting Luo (Johns Hopkins University) 2024 Rosalind Franklin Young Investigator Award Recipient Bridging Atomistic, Mesoscale, and System Perspectives in the Design of V2O5 Cathodes for Li-ion Batteries
2:00-2:40	Grigorii Skorupskii (Princeton University) Designing Complex Electronic and Magnetic Orders
2:40-3:20	Randall Meyer (ExxonMobil Research and Engineering Company) X-ray Absorption Spectroscopy Studies for Early-stage Industrial Catalysis Research
3:20-3:35	Break (Lower Level Gallery)
3:35-4:15	Vasilije Dobrosavljevic (Carnegie Institution for Science) Probing Melting in Deep Planetary Interiors with Multi-technique Synchrotron Methods
4:15-5:00	Jim Kerby and Jonathan Lang (Argonne National Laboratory) APS Upgrade Q&A
5:30	Banquet bus transportation loads in front of APS and Guest House
6:00	Banquet Dinner (Monte Bello Estate)

Tuesday, May 7, 2024	Shuttle available for Lunch and WK#3
8:00	Registration (Atrium lobby)
7:30	Coffee/Tea (Lower Level Gallery)
8:00-5:00	Exhibits (Atrium & Lower Level Gallery)
5:30-8:00	Poster Session (Bldg. 201, shuttle available)

CNM Plenary Session	
10:00-10:10	Nihar Pradhan, CNM User Executive Committee Vice-Chair (Jackson State University) Welcome Remarks and UEC Update
10:10-11:00	E. Charles H. Sykes (Tufts University) CNM Keynote Address
11:00-11:30	Teri Odom (Northwestern University) Exciton-polariton Dynamics in Strongly Coupled Plasmonic Lattices
11:30-12:00	Danielle Chamberlin (NanoPattern Technologies) Thin Film Photo-patternable Quantum Dot Downconverters

Joint APS/CNM WK 1: Advancing Data Analysis for XRD/XCT in Post-APS-U: FAIR, Automated Analysis Pipelines and Graph Deep Learning	
1:30-1:40	D. Travis Carter
1:40-2:00	Daniela Ushizima
2:00-2:20	Roger French
2:20-2:40	Pawan Tripathi
2:40-3:00	Hemant Sharma
3:00-3:10	Break (Atrium)
3:10-3:30	Reeju Pokharel
3:30-3:50	Rafael Vescovi
3:50-4:10	Brian Toby
4:10-4:30	Dan Savage
4:30-4:50	Jana B. Thayer
4:50-5:00	Conclusion and Closing Remarks

APS WK 3: Operando Synchrotron Experiments on Advanced Manufacturing Processes	
8:00-8:30	Organizers Introduction
8:30-9:00	Steven Van Petegem
9:00-9:30	Nicholas Calta
9:30-10:00	Break (Bldg. 446)
10:00-10:30	Anthony Rollett
10:30-11:00	Amy Clarke
11:00-11:30	Xuan Zhang
11:30-1:30	Lunch (Argonne Guest House)
1:30-2:00	Ho Yeung
2:00-2:30	Lianyi Chen
2:30-3:00	Nathan Crane
3:00-3:15	Break (Bldg. 446)
3:15-3:45	Atieh Moridi
3:45-4:15	Xun Liu
4:15-4:45	Frank Pfefferkorn
4:45-5:00	Group Discussion

APS WK 8: Quantum Solids under a Dark-field X-ray Microscope: A Journey from Imagination to Discovery at APS-U	
8:00-8:05	Introduction and welcome
8:05-8:10	Introduction by Chair
8:10-8:40	Zhan Zhang
8:40-9:10	Peter Kenesei
9:10-9:40	Daniel Gianola
9:40-9:55	Break (Lower Level Gallery)
Session II: Quantum Solids under a Dark-field X-ray Microscope	
9:55-10:00	Introduction by Chair
10:00-10:30	Jayden Plumb
10:30-11:00	Kaan Alp Yay
Session III: Discussion	
11:00-11:30	Discussion: Potential First Experiments
11:30-1:30	Lunch (Argonne Guest House)
Session IV: Functional Devices	
1:30-1:35	Introduction by Chair
1:35-2:05	Elliot Kisiel
2:05-2:35	Pavel Salev
2:35-2:50	Break (Atrium)
Session V: Novel Development and Directions	
2:50-2:55	Introduction by Chair
2:55-3:25	Mads Carlsen
3:25-3:55	Doga Gursoy
3:55-4:25	Takashi Kimura
Session VI: Discussion and Wrap-up	
4:25-5:00	Discussion: Potential First Experiments

Wednesday, May 8, 2024 Shuttle available for Lunch and WK#2

8:00-2:00	Registration (Atrium lobby)
7:30	Coffee/Tea (Atrium)
8:00-1:30	Exhibits (Atrium & Lower Level Gallery)

Joint APS/CNM WK 2: Advanced Characterizations for Critical Materials Innovation and Sustainability	
1:30-1:40	Opening Remarks
1:40-2:10	Peter Sushko
2:10-2:40	Linsey Seitz
2:40-3:10	Pietro Papa Lopes
3:10-3:30	Break (Bldg. 446)
3:30-4:00	Mark Schlossman
4:00-4:30	Benjamin Doughty
4:30-5:00	Michael Servis

APS WK 7: Ultra-small, Ultra-powerful: APS-U-USAXS' Role in Advancing Materials and Manufacturing	
8:00-8:05	Opening Remarks
8:05-8:30	Jan Ilavsky
8:30-8:55	Andrew Allen
8:55-9:20	Trevor Willey
9:20-9:45	Lilo Pozzo
9:45-9:55	Break (Atrium)
9:55-10:20	Lawrence Anovitz
10:20-10:45	Greg Beaucage
10:45-11:30	Panel Discussion

APS WK 6: Elucidating 3D Microstructures through Diffraction-based Imaging and Simulations	
8:15-8:30	Jun-Sang Park
8:30-9:00	Hemant Sharma
9:00-9:30	Weijan Zheng
9:30-9:50	Break (Atrium)
9:50-10:20	Stephan Hruszkewycz
10:20-10:50	Laura Vietz
10:50-11:20	Wenxi Li
11:20-1:30	Lunch (Argonne Guest House)
1:30-2:00	Darren Pagan
2:00-3:00	Matthew Kasemer
3:00-3:20	Break (Atrium)
3:20-4:20	Michael Sangid, Krzysztof Stopka, and Kyle Jung
4:20-4:50	Ryan Hurley
4:50-5:20	Marm Dixit
5:20-5:30	Break
5:30-6:00	Darren Pagan

APS WK 9: Using Synchrotron Light to Probe Earth and Environmental Systems (EES)	
8:00-8:05	Opening Remarks
Session I: Instrumental/eBERlight/FICUS	
8:05-8:20	Zou Finfrock
8:20-8:50	Tamas Varga
8:50-9:10	Joanne Stubbs
9:10-9:30	Andrei Smertenko
9:30-10:00	Break (Atrium)
Session II: Earth and Environmental Science (Soil, Biogeochemistry, Atmospheric)	
10:00-10:30	Alexandra Kravchenko
10:30-10:50	Sharon Bone
10:50-11:10	Viktor Nikitin
11:10-11:30	Lucie Stetten
11:30-1:30	Lunch (Argonne Guest House)
Session III: Plant and Rhizosphere Science	
1:30-2:00	Joseph Jakes
2:00-2:20	Gyorgy Babnigg
2:20-2:40	Gosia Korbas
2:40-3:00	Tom Regier
3:00-3:30	Break (Atrium)
Session IV: Data Processing, Integration, and Automation	
3:30-3:50	Arthur Glowacki
3:50-4:10	Neil Getty
4:10-4:30	Maksim Yakovlev
4:30-5:00	Round Table Discussion

Thursday, May 9, 2024 Shuttle available for Lunch

8:00-2:00 Registration (Atrium lobby)

7:30 Coffee/Tea (Atrium)

Joint APS/CNM WK 2: Advanced Characterizations for Critical Materials Innovation and Sustainability	
1:30-2:00	Chong Liu
2:00-2:30	Xiao Su
2:30-3:00	Albert Lipson
3:00-3:20	Break (Bldg. 446)
3:20-3:50	Eva Allen
3:50-4:20	Linqin Mu
4:20-4:30	Closing Remarks

APS WK 10: Advanced X-ray Capabilities for High-pressure Research	
1:30-1:35	Opening Remarks
1:35-2:05	Guoyin Shen
2:05-2:35	Maddury Somayazulu
2:35-2:50	Break (Atrium)
2:50-3:20	Vitali Prakapenka
3:20-3:50	Paulo Rigg
3:50-4:20	Jiyong Zhao
4:20-4:40	Open Discussion

APS WK 5: Integrating Nanofabrication with Next Generation X-ray Techniques to Probe and Control Novel Phenomena	
8:30-8:40	Gilberto Fabbris
8:40-9:05	David Czaplewski
9:05-9:30	Alexander High
9:30-9:55	Stephan Hruszkewycz
9:55-10:10	Preetha Sarkar
10:10-10:30	Break (Atrium)
10:30-10:55	Claire Zurkowski
10:55-11:20	Pedro Lozano
11:20-11:45	James Walsh
11:45-12:00	Eduardo Poldi

APS WK 11: APS-U-enabled Advanced Tools for Structural Biology: Advancing Enzymatic Catalysis and Drug Discovery through Synchrotron Serial Crystallography	
8:30-8:40	Opening Remarks
8:40-9:15	Alke Meents
9:15-9:50	Simon Vecchioni
9:50-10:40	Break (Atrium) & Beamline Posters
10:40-11:15	John Rose
11:15-11:50	Zhong Ren
11:50-1:30	Lunch (Argonne Guest House)
1:30-2:05	Vadim Cherezov
2:05-2:40	Kara Zeilinski
2:40-3:10	Break (Atrium) & Beamline Posters
3:10-3:45	Marius Schmidt
3:45-4:20	Meng Yuan
4:20-4:55	Rebecca Jernigan
4:55-5:00	Final Remarks

Friday, May 10, 2024	
8:30-12:00 Workshops	
7:30	Coffee/Tea (Atrium)

APS WK 4: The Future of Full-field 3D Imaging at APS-U: A Multiscale and Multimodal Approach		APS WK 10: Advanced X-ray Capabilities for High-pressure Research	
8:30-8:50	Alberto Mittone	8:55-9:00	Opening Remarks
8:50-9:10	Viktor Nikitin	9:00-9:30	Wonsuk Cha
9:10-9:35	Aaron Kuan	9:30-10:00	Felix Lehmkuhler
9:35-10:00	Nathan Bechle	10:00-10:30	Hemant Sharma
10:00-10:20	Break (Atrium)	10:30-10:45	Break (Atrium)
10:20-10:45	Jake Socha	10:45-11:15	Daniel Haskel
10:45-11:10	Tim Fister	11:15-11:45	Naoki Ishimatsu
11:10-11:35	Nikhilesh Chawla	11:45-12:15	Xiaoyi Zhang
11:35-12:00	Christopher Powell	12:15-12:30	Open Discussion and Conclusion

APS WK 5: Integrating Nanofabrication with Next Generation X-ray Techniques to Probe and Control Novel Phenomena	
8:30-8:55	Zachary Geballe
8:55-9:20	Luiz Pimenta Martins
9:20-9:45	Stanley Tozer
9:45-10:00	Zackary Rehfuss
10:00-10:30	Break (Atrium)
10:30-10:55	Jeffrey S. Pigott
10:55-11:20	Shua Sanchez
11:20-11:45	Jiarui Li
11:45-12:00	Discussion and Closeout

SESSION	**LOCATION**
Combined Plenary Session	Bldg. 402 Lecture Hall
APS Plenary Session	Bldg. 402 Lecture Hall
CNM Plenary Session	Bldg. 402 Lecture Hall
Joint APS/CNM WK #1	Bldg. 402 Lecture Hall
Joint APS/CNM WK#2	Bldg. 446, APCF Conference Room
APS WK#3	Bldg. 446, APCF Conference Room
APS WK#4	Bldg. 401, Rm. A1100
APS WK#5	Bldg. 402 Lecture Hall
APS WK#6	Bldg. 402 Lecture Hall
APS WK#7	Bldg. 401, Rm. A1100
APS WK#8	Bldg. 401, Rm. A1100
APS WK#9	Bldg. 402, Rm. E1100/1200
APS WK#10	Bldg. 402, Rm. E1100/1200
APS WK#11	Bldg. 401, Rm. A1100