





ADMS Test Bed and FAST-DERMS Workshop

Highlighting work performed on NREL's Advanced Distribution Management System (ADMS) Test Bed and through the GMLC-funded Federated Architecture for Secure and Transactive Distributed Energy Resource Management Solutions (FAST-DERMS) project

Wednesday, December 11, 2022, 11:00 a.m.— 5:00 p.m.

NREL's Energy Systems Integration Facility (ESIF)

Host: Murali Baggu, Laboratory Program Manager, Grid Integration

TIME (MST)	EVENT	PRESENTER (affiliation is NREL unless indicated)	LOCATION
11:00 a.m.	Security Check-in and NREL Badge Pickup		RSF Reception
11:30 a.m.	Lunch Welcome and Overview of Office of Electricity, Buildings Technology Office and GMLC programs at NREL	Murali Baggu Achilles Karagiozis	ESIF B208
12:15 p.m.	Overview of DOE Office of Electricity and Buildings Technology Office Programs	Chris Irwin, OE, DOE Cecilia Johnson, BTO, DOE	ESIF B208
12:45 p.m.	ARIES and ADMS Test Bed Overview and Updates	Annabelle Pratt	ESIF B208
1:45 p.m.	ADMS Test Bed Use Case: System restoration with improved fault tracking	Ismael Mendoza	ESIF B208
2:15 p.m.	An Innovative Suite of Physics-informed Learning Tools for Real-time DER System Data Analytics (AI-PhyX)	Fei Ding	ESIF B208
2:45 p.m.	Break		
3:15 p.m.	Resilience and Stability-Oriented Cellular Grid Formation and Optimization (REORG)	Fei Ding	ESIF B208
3:45 p.m.	PV Integration Using a Virtual Air Gap (PIVA)	Ismael Mendoza	ESIF B208
4:15 p.m.	ESIF DERMS investments	Sarah Williams	ESIF B208
4:45 p.m.	Logistics for Day 2	Annabelle Pratt	ESIF B208
5:00 p.m.	Adjourn		
6:30 p.m.	Dinner (No host)	TBD	







ADMS Test Bed and FAST-DERMS Workshop

Thursday, December 12, 2024, 8:30 a.m.— 3:30 p.m.

NREL's Energy Systems Integration Facility (ESIF)

Host: Murali Baggu, Laboratory Program Manager, Grid Integration

TIME (MST)	EVENT	PRESENTER (affiliation is NREL unless indicated)	LOCATION
8:30 a.m.	Day 2 Welcome	Juan Torres	ESIF B208
8:50 a.m.	Federated Architecture for Secure and Transactive DER Management Solutions (FAST-DERMS)	Annabelle Pratt Jason MacDonald (LBNL)	ESIF B208
9:35 a.m.	ADMS Test Bed Use Case: Federated DERMS for a High PV System	Annabelle Pratt Andrew Ingram (SCS)	ESIF B208
10:00 a.m.	ADMS Test Bed Use Case: Co-optimizing grid and facility operations	Harsha Padullaparti Sunil Cherian (Spirae)	ESIF B208
10:30 a.m.	Break		
10:50 a.m.	Smart Grid Test Bed Collaboration	Matt Hubbard (PGE) Annabelle Pratt	ESIF B208
11:20 a.m.	Project Laboratory Demonstrations	Murali Baggu Annabelle Pratt	ESI ESIF PSIL*
12:30 p.m.	Lunch Autonomous Energy Systems	Fei Ding	
1:15 p.m.	Project Laboratory Demonstrations	Murali Baggu Annabelle Pratt	ESIF ESRL ESIF PSIL*
2:30 p.m.	Panel on ARIES User Call for Future ADMS Test Bed Use Cases and other upcoming projects	Jyoteesh Arumalla (DEV) Brett Jackson (CSU)Matt Hubbard	ESIF B208
3:15 p.m.	Concluding Remarks	Murali Baggu	ESIF B208
3:30 p.m.	Adjourn		
3:45 p.m.	OPTIONAL tour of the ESIF	Annabelle Pratt	ESIF
4:45 p.m.	Adjourn (tour)		

* NREL laboratory guidelines

Wear comfortable walking shoes.







- Sandals, flip flops, open-toed, or sling-back shoes are not allowed in NREL laboratories.
- Shorts are not allowed in NREL laboratories.
- Water bottles or other liquids are not allowed in NREL laboratories.
- Follow the instructions of your NREL host and security personnel at all times—especially in case of sounding alarms or other emergencies.