



**SunShot National Laboratory Multiyear Partnership  
(SuNLAMP) Workshop**  
Argonne National Lab  
Chicago, IL  
July 21, 2017

**July 21, Friday**

- 08:00 – 08:15 AM Registration/Sign-in
- 08:15 – 08:30 AM Argonne Welcome – Guenter Conzelmann
- 08:30 – 08:45 AM SI Vision/SunLaMP Introduction – Guohui Yuan
- 08:45 – 09:00 AM Shrirang Abhyankar @ANL, A Tool Suite for Improving Grid Performance and Reliability of Combined Transmission-Distribution with High Solar Penetration
- 09:00 – 09:15 AM Nader Samaan @PNNL, Enabling High Penetration of Distributed PV through the Optimization of Sub-Transmission Voltage Regulation
- 09:15 – 09:30 AM Robert Broderick @Sandia, Rapid QSTS Simulations for High-Resolution Comprehensive Assessment of Distributed PV
- 09:30 – 09:45 AM Jay Johnson @Sandia, Secure, Scalable Control and Communications for Distributed PV
- 09:45 – 10:00 AM Bri-Mathias Hodge @NREL, Opportunistic Hybrid Communications Systems for Distributed PV Coordination
- 10:00 – 10:15 AM Jhi-Young Joo @LBNL, A Cyber Physical Co-simulation Platform for Distributed Energy Resources in Smart Grids (CyDER)
- 10:15 – 10:30 AM Coffee Break
- 10:30 – 10:45 AM Sila Kiliccote @SLAC, Visualization and Analytics of Distribution Systems with Deep Penetration of Distributed Energy Resources (VADER)
- 10:45 – 11:00 AM John Grosh @LLNL, GMLC Projects Overview on Design and Planning
- 11:00 – 11:15 AM Jeff Dagle @PNNL, GMLC Projects Overview on Operations and Control
- 11:15 – 11:30 AM Henry Huang @PNNL, GMLC Project: Development of Integrated Transmission Distribution and Communication Models
- 11:30 – 11:45 AM Bri-Mathias Hodge @NREL, Accelerating Systems Integration Standards (ACCEL)
- 11:45 – 12:30 PM Lunch Break
- 12:30 – 1:30 PM Data Requirements for Distribution Network Numerical Analysis
1. Network models; sensor data; load & solar data; data synchronization; standard data formats
  2. Data interaction; data adaptors



3. Data repository for sanitized input data sets

- 01:30 – 02:30 PM Application Integration and Simulation Platforms
- 02:30 – 03:30 PM Distribution Network Numerical Analysis Algorithms
1. Summary of existing tools @ the labs
  2. Distribution state estimation
  3. Power flow analysis & optimization
  4. Solar, load and DER forecasting
- 03:30 – 03:45 PM Coffee Break
- 03:45 – 04:45 PM Telecommunications, Cybersecurity and Interoperability
- 04:45 – 05:00 PM Concluding Remarks – DOE

### Coffee/Lunch (\$21/person)

Coffee and lunch will be served at the given times on the agenda. **Note there is a \$21/person charge** for the expenses that will be collected at the registration desk, please have exact amount, no credit. Please let Katie McShane ( [KMcShane@anl.gov](mailto:KMcShane@anl.gov)) know of any dietary restrictions.

### Getting to Argonne

**To reach Argonne from O'Hare International Airport**, take I-294 south to I-55. Exit west on I-55 (toward St. Louis ) and continue for about four miles to Cass Avenue. Exit south on Cass and turn right at the Argonne sign on Northgate Road, immediately south of I-55. Follow Northgate Road to the Argonne Information Center.

**To reach Argonne from Midway Airport**, take Cicero Avenue north to I-55. Enter I-55 south and continue for about 14 miles to Cass Avenue. Exit south on Cass and turn right at the Argonne sign on Northgate Road, immediately south of I-55. Follow Northgate Road to the Argonne Information Center.

**To reach Argonne by public transportation**, take the Metra (Burlington) train to the Westmont station. PACE bus 715 leaves the Westmont Metra station at 7:22 a.m. and 7:58 a.m., arriving at the Argonne Information Center at 7:35 a.m. and 8:14 a.m., respectively. In the evening, PACE bus 715 leaves the Argonne Information Center at 5:25 p.m., arriving at the Westmont Metra station at 5:42 p.m. Since the bus schedule is subject to change without notice, visitors planning on using public transportation to reach Argonne are advised to verify the bus schedule by calling PACE at 847/364-7223 or checking the [PACE web site](#).

### Getting to the workshop location

#### Gate Pass pickup location



Gate Passes are to be picked up at the Argonne Information Center (Building 224) located at the North Entrance (Main Gate).

**Instructions for foreign visitors on what documents they need to bring:**

Upon your arrival to Argonne National Laboratory, you must stop at the Argonne Information Center, Bldg. 224 and present your original passport, original visa and/or I-94 or I-94W (Departure Record). If the expiration date on the I-94 or I-94W reads D/S (Duration of Status), you must present the supporting immigration documentation (i.e., I-20, DS-2019). Failure to do so may delay or deny your access to the site.

**Instruction for U.S. citizens on what documents they need to bring:**

State or federal ID, passport or driver's license

**Workshop location**

The workshop will be held in the Theory and Computing Sciences (TCS) building (Building 240) conference center (rooms 1405, 1406 and 1407). The building is located just off the right of the Main Gate road. To get to the TCS building from the Information Center, take the first right on NorthGate road, after entering the main gate. The TCS building is located on the right.



Theory and Computing Science Conference Center (Building 240)



### Nearby hotels:

Argonne Guest House (on site)  
9700 S. Cass Avenue, Bldg. 460  
Argonne, IL 60439  
\$88.40 + 6% tax  
630-739-6000 or 800-632-8990  
<https://www.anlgh.org/>

Marriott-Burr Ridge (Southwest)  
1200 Burr Ridge Parkway  
Burr Ridge, IL 60527  
\$112.00 + 11% tax  
Distance to Lab: under 10 minutes (6.5 miles)  
630-986-4100  
<http://www.marriott.com/hotels/travel/chisw-chicago-marriott-southwest-at-burr-ridge/>

Aloft Bolingbrook  
500 Janes Avenue  
Bolingbrook, IL 60440  
\$105.30 includes tax  
Distance to Lab: 17 minutes (10.2 miles)  
630-410-6367  
<http://www.aloftbolingbrook.com/>

### Argonne National Laboratory contacts:

Host - Shrirang Abhyankar cell: 312-752-8789

Administrative – Katie McShane: 815-690-8857