Welcome/DOE Laser Safety Officer Workshop 2026

DOE Laser Safety Officer Workshop LLNL

May 19, 2026

Jamie J. King (LLNL), Workshop Director/Co-Chair | Mike Roth (Sandia-CA), Workshop Co-Chair

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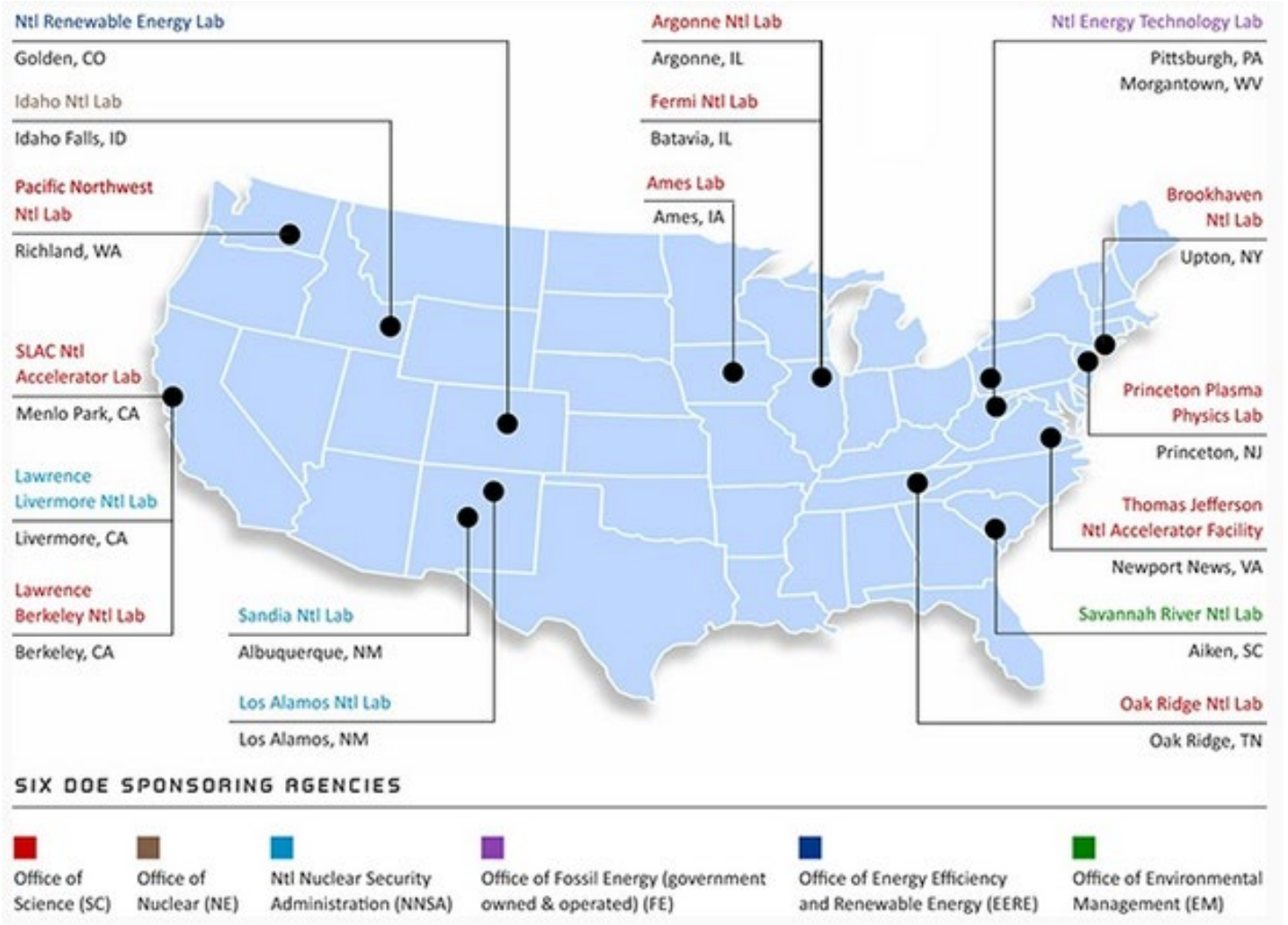
Department of Energy Laboratories

- 17 Main Laboratories
  - Office of Science
  - National Nuclear Security Administration
  - Office of Nuclear
  - Office of Energy Efficiency and Renewable Energy
  - Office of Fossil Energy
  - Office of Environmental Management

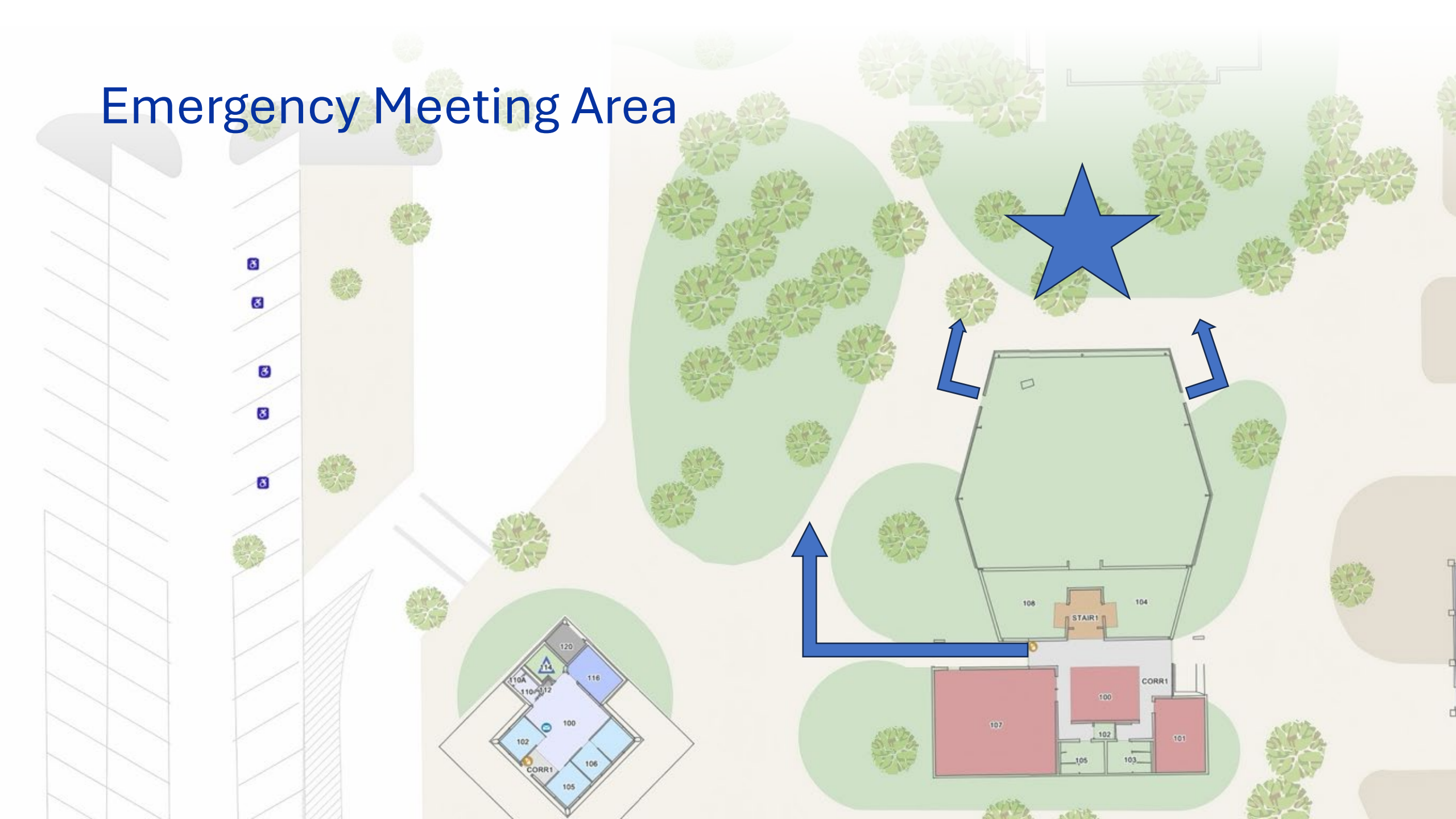


Welcome to the 2022 DOE LSO Workshop

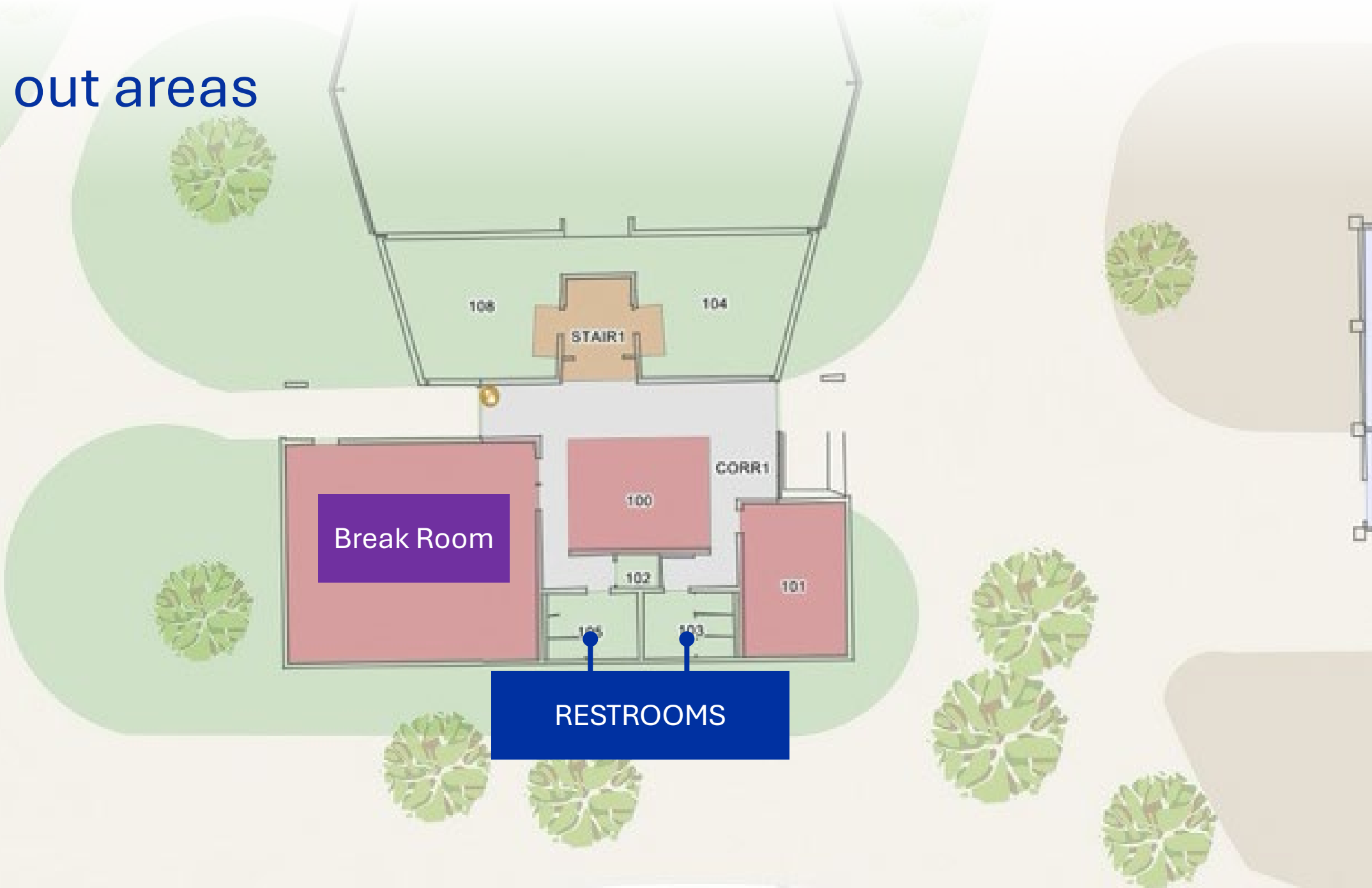
- General Information
  - **NO PHOTGRAPHY!**
  - **Be aware of where you are!**
- Breaks (20 minutes)
- Lunch (90 minutes)
- Internet
  - Wi-Fi: Guest Network
    - **Password: greatscience**
    - **Sponsor:**

Secure Area

Emergency Meeting Area

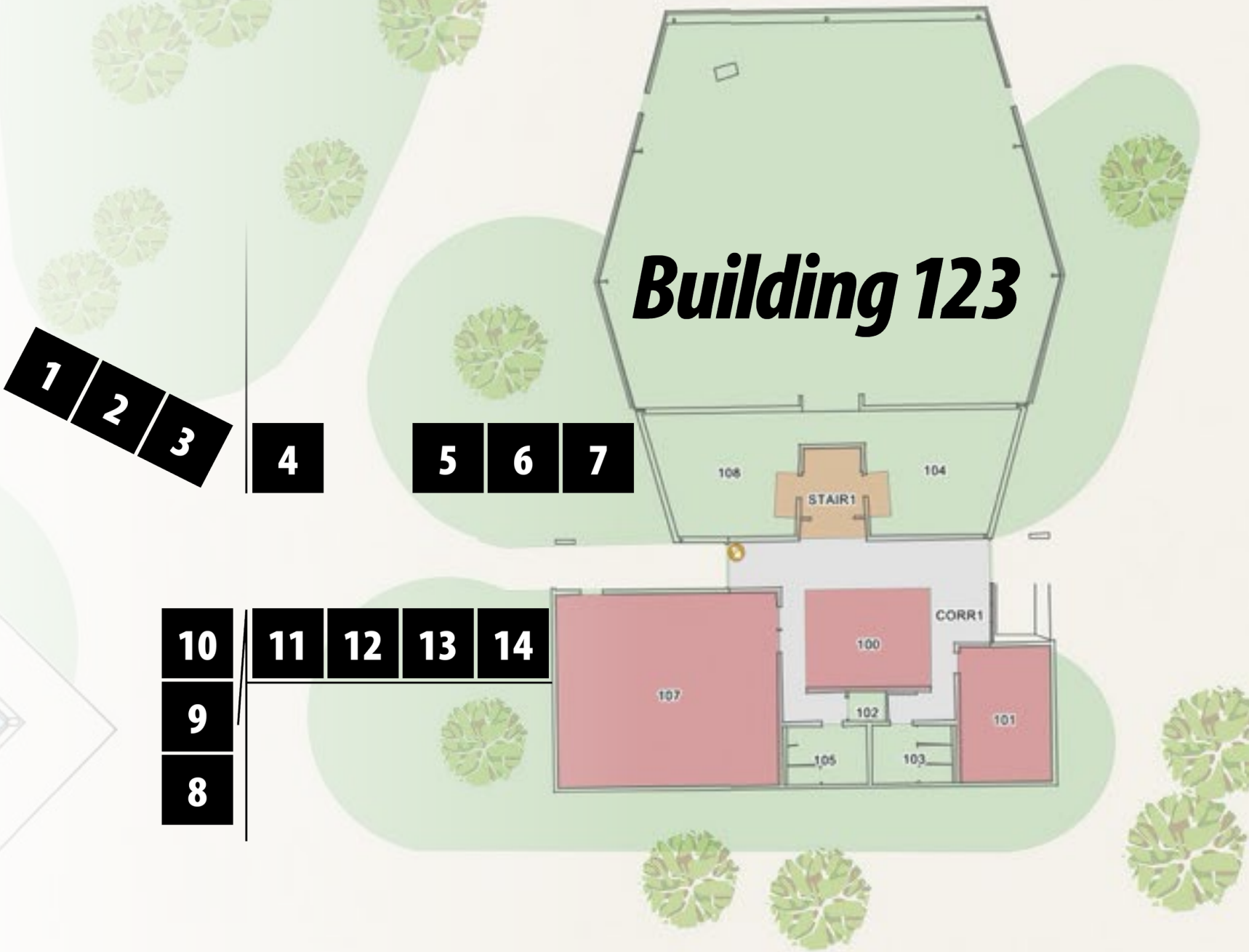


Break out areas



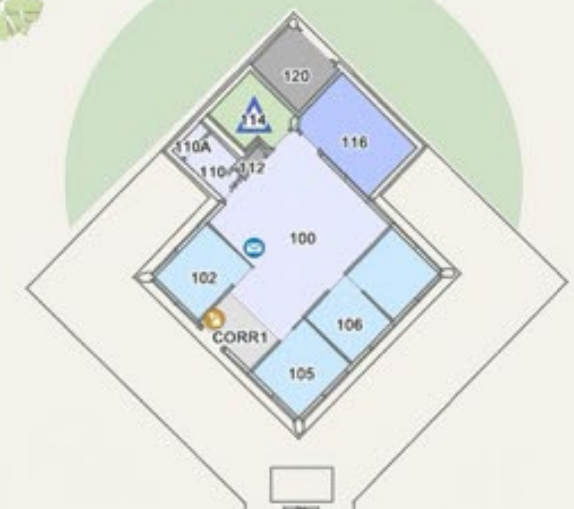
Vendor area

1. Edmund Optics
2. RLI
3. Gentec-eo
4. Lasermet
5. NOIR
6. LaserSafety.NET
7. LIA
8. Laservision
9. Directed Light
10. Photonics Group
11. Kentek
12. Trumpf
13. Univet
14. MKS



Bus Stop

BUS STOP



Cafeteria

CAFETERIA
120A
140A
138
136
CORR3
120
140
120B
120C
STOR1
153
154
155
152
CORR4
STOR2
170
172
166B
168
166A
164
166
CORR1
CORR2
1557
1558
1537

Secure Area

MUSIC, MARKET & MOTORS

May 19, 2026

11:30am-1:00pm

In-Person

PERFORMANCE BY:

WWW.LLESA.COM/MUSIC-AT-THE-BOSQUE

llesa

WWW.LLESA.COM/MUSIC-AT-THE-BOSQUE

llesa

Directions to Music, Market & Motors

Follow the blue line on West Perimeter Drive, then take a right on Westgate Drive to N Inner Loop. Parking Lot D7 will be on your right-hand side.

Directions to *Da Boccery* *(only 7.4 miles away to the west)*

14 min (7.4 miles)

via Concannon Blvd

Fastest route, the usual traffic

⚠ This route has restricted usage or private roads.

Lawrence Livermore National Laboratory
7000 East Ave, Livermore, CA 94550

- ↑ Head west on East Ave
  ⚠ Restricted usage road
  29 sec (0.1 mi)
- ⌄ Drive along Tesla Rd, Concannon Blvd and Holmes St
  13 min (7.2 mi)
- ↰ Turn left onto S Vasco Rd
  1.0 mi
- ↱ Turn right onto Tesla Rd
  1.3 mi
- ↑ Continue onto S Livermore Ave
  0.5 mi
- ↰ Turn left onto Concannon Blvd
  2.1 mi
- ↰ Turn left onto Holmes St
  1.0 mi
- ↑ Continue onto Vallecitos Rd
  0.3 mi
- ↱ Turn right onto E Vineyard Ave
  0.9 mi
- ↰ Turn left
  ℹ Destination will be on the left
  44 sec (207 ft)

Da Boccery
175 E Vineyard Ave, Livermore, CA 94550

History (How did we get here?)

- Many laser accidents begin to occur at different DOE facilities (early 2000s)
  - 7 total in just over 3 years (late 2001 – early 2005)

History (How did we get here?)

- Special Operations Report (SOR) on Laser Safety is released in **February of 2005**
  - "LSO training is often **generic** in that it is one-time and "**one size fits all**." This training is often **insufficient** to prepare LSOs for the types of lasers used and potential hazards. Many LSOs have not had refresher training sufficient to keep pace with laser technology and changes in regulations, which hinders proper hazard evaluation."
  - "Currently, laser safety at each laboratory is independent, and **no networking** occurs between LSOs. **Best practices** must be rediscovered by each LSO. Hence, there is a need for an **ongoing communication** mechanism across the entire Department (e.g., a working group or coordinating committee)."

SOR cited weaknesses in training and communication across the complex

The DOE LSO Workshop (2005)

- Ken Barat, NIF LSO- Reads report and is inspired…
- NIF is currently under construction and cannot afford to be shutdown for these month-long times
- NIF&PS sees the light
  - NIF provides 100% support to Ken's efforts
  - Attendance of **93 (no fee)**
  - Tours (NIF and Mercury Laser Labs)
  - Success!!!
  - What now?
  - Let's try this again…

Held Annually (2005 – 2014)

2005- Lawrence Livermore National Laboratory
2006- Brookhaven National Laboratory
2007- Argonne National Laboratory
2008- Sandia National Laboratories, Los Alamos National Laboratory
2009- Penn University of Pennsylvania
2010- Berkeley Lab
2011- Massachusetts Institute of Technology
2012- SLAC National Accelerator Laboratory
2013- NIST National Institute of Standards and Technology U.S. Department of Commerce
2014- Lawrence Livermore National Laboratory

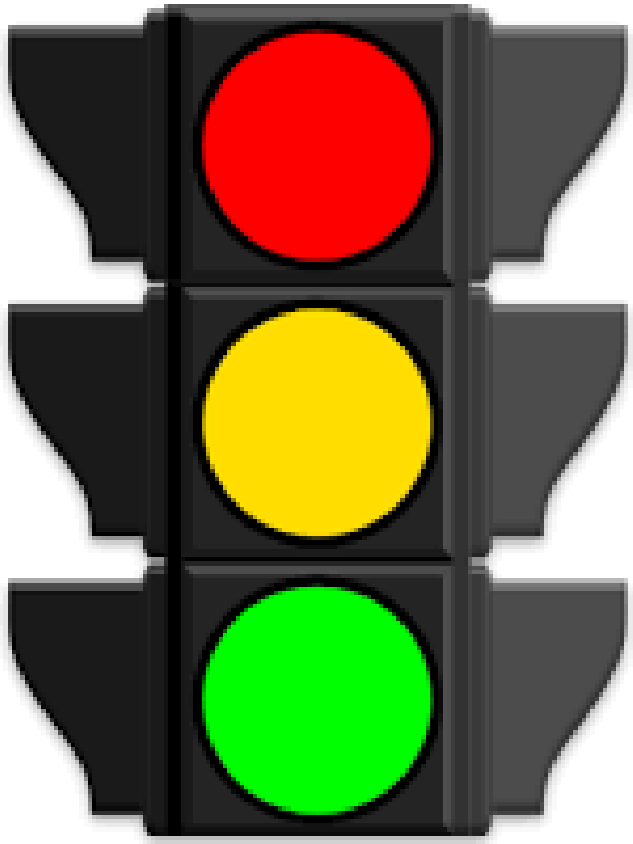
A Nobel Laureate, baseball, a natural disaster, and more…

Move to Bi-annually (2016-Present)

- 2016- Fermilab
- 2018- Laboratory for Laser Energetics, University of Rochester
- 2020- ~~TEXAS~~ The University of Texas at Austin COVID
- 2022- Berkeley Lab
- 2024- TEXAS The University of Texas at Austin
- 2026- Lawrence Livermore National Laboratory, Sandia National Laboratories
- 2028- Sandia National Laboratories Tentatively scheduled for Alb. NM

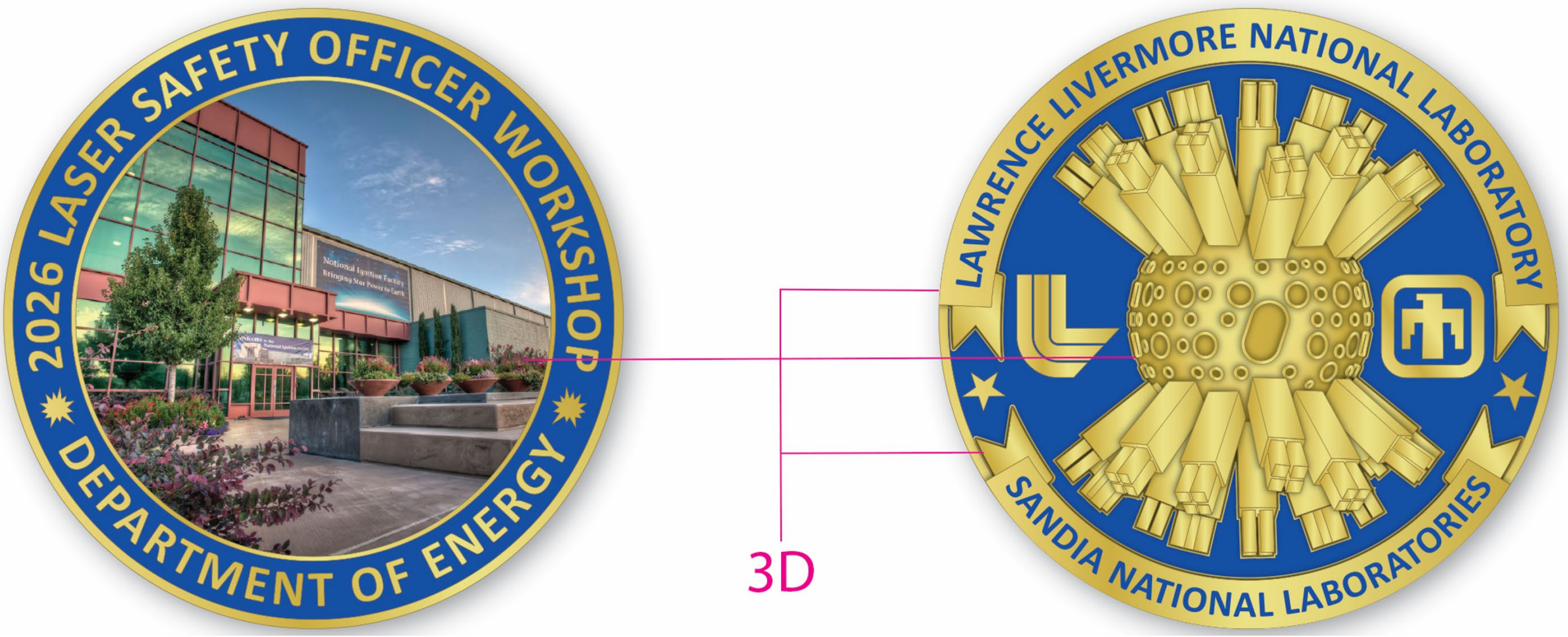
Presenters and Session Chairs

- Speaking spots are 30-minutes
- **RED**
  - Done – Take Questions
- **YELLOW**
  - 2 minutes left – Wrap it up
- **GREEN**
  - 5 minutes left



Please allow at least 5 minutes for discussion

Commemorative Speaker Coin



Thank you for your support

- 2026 Technical Planning Team
  - Karin Adams– INL
  - Karla Armstrong-LLNL
  - Mendy Brown– SNL-NM
  - DeWayne Holcomb– UT Austin
  - Hayden Johnson – LLNL (Coin, and T-shirt design)
  - Jamie King – Director, LLNL
  - Mike Roth– Technical Planning Co-Chair, SNL-CA
- Vendors
- Presenters/Session Chairs
- Programmatic Planning Team, NIF&PS & ES&H staff, tour guides and safety escorts,
- Document Services - everything that is making the workshop first class.
- Over 100 individual people were required to make this event happen!

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