

# 2023 CESM Tutorial

## Welcome and Introduction Monday - Day 1



*Alice DuVivier and  
Elizabeth Faircloth*

July 10, 2023



# Welcome to NCAR Mesa Laboratory!



This is the first in-person CESM tutorial at the Mesa Laboratory since 2019!

# Land Acknowledgement



We recognize the many contributions of Indigenous peoples in Colorado and acknowledge that the Mesa Laboratory is located on the traditional territories and ancestral homelands of the Cheyenne, Arapaho, Ute and many other Native American nations. It is important to recognize the history of the state, however difficult, and the histories and experiences of the Indigenous peoples who have lived in these territories for millennia. Their forced removal from these territories has caused devastating and lasting impacts. While we can never undo or rectify the devastation wrought on Indigenous peoples, we commit to improving and enhancing engagement with Indigenous peoples and issues locally and globally.

# Code of Conduct

*Here we value respectful dialogue, please...*



[www.cgd.ucar.edu/diversity](http://www.cgd.ucar.edu/diversity)

## Primary Contacts

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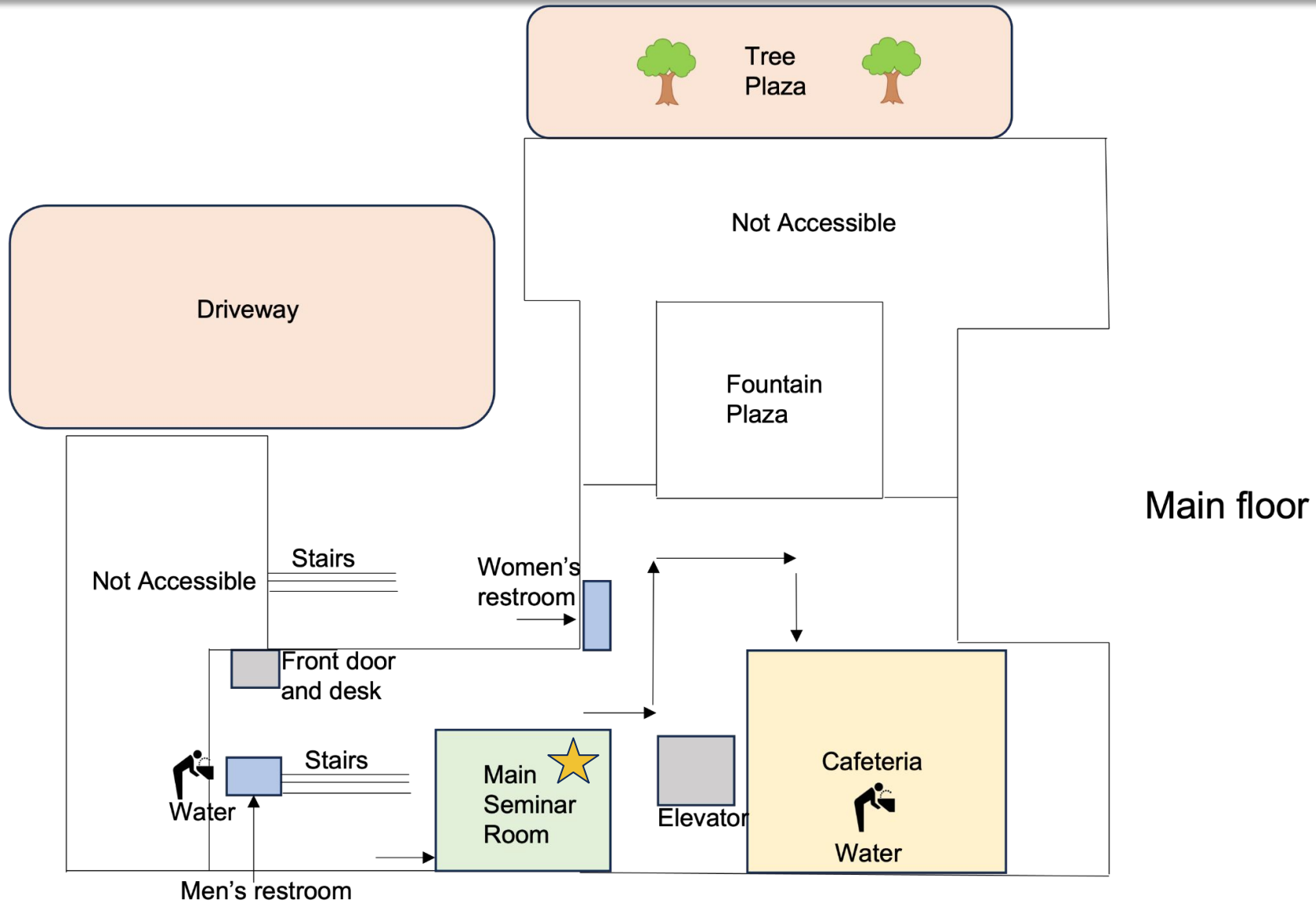


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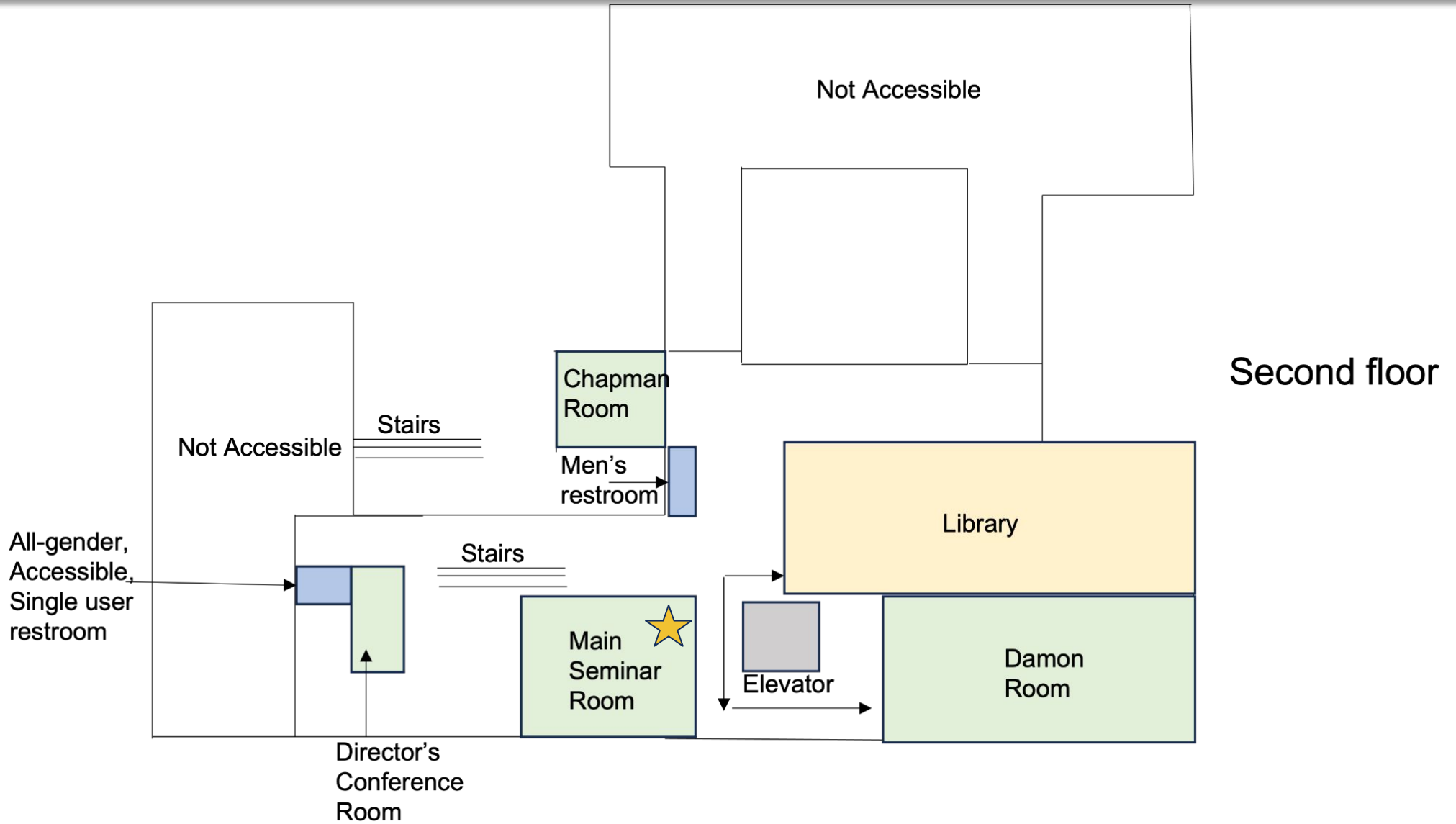


And many other NCAR admins and staff...

# Map



# Map



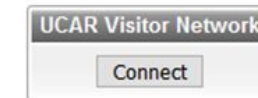
# Computer Information

- Wireless access
  - Use the **UCAR Visitor** wireless. It is an open, unencrypted network that will require registration before full access is enabled.
  - Use the **Eduroam** wireless only if you have it already installed on your computer
- Project account & Reservation Queues
  - We have set these as a default in the .profile or .tschrc files we instruct you to use. If you have problems using these or conflicts with other, existing project codes please let us know ASAP.
- Slack
  - You can ask questions here, share resources, coordinate for evening gatherings, etc.
  - Follow the link and instructions we sent by email to join. If you need us to re-send, please let us know.
  - Please remember that on this Slack channel we expect you to abide by the NCAR Code of Conduct.

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## Tutorial Goals

### **As a result of attending the CESM Tutorials, attendees will:**

1. Gain a foundational scientific understanding of the core CESM components and CESM features.
2. Be able to run and modify the model and use the output.
3. Have opportunities to network with peers and CESM scientists.
4. Attain an understanding of High Performance Computing (HPC) needed for CESM.
5. Perceive the tutorials to be an inclusive learning environment.

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### **Please ask your questions!**

We all come from different backgrounds and are here to learn. There are no stupid questions! Please do not leave still confused and with your questions unanswered.

- Ask presenters during the Q&A after their lectures or at a break.
- Ask helpers during lab sessions
- Ask during the meet-a-scientist lunch session
- Ask your peers

# Activities this week

- Lectures
  - Component Lectures (CL) → information about how the core model components work
  - Specialized Lectures (SL) → other topics
- Hands-on lab activities
  - Days 1-3 → practice running the model with exercises (everyone does the same activities)
  - Day 4 → example plotting and diagnostics for the component(s) you are interested in
  - Day 5 → challenge exercises for the component you are interested in
- Lunch
  - Food is available in the Mesa Lab cafeteria.
    - Vegetarian and Gluten free options are available.
    - You are responsible for paying for your own lunch.
  - Meet a scientist (optional) on Tuesday, Wednesday, Thursday
    - Casual conversation with no fixed agenda
    - **We will assign you to a scientist for this to ensure reasonably sized groups**
  - Mesa Lab tours (optional) on Wednesday, Thursday, Friday
    - We will assign you to a day for the tour
- Shuttle back to CU Campus lodging leaves **at 5pm** every day

# Questions?