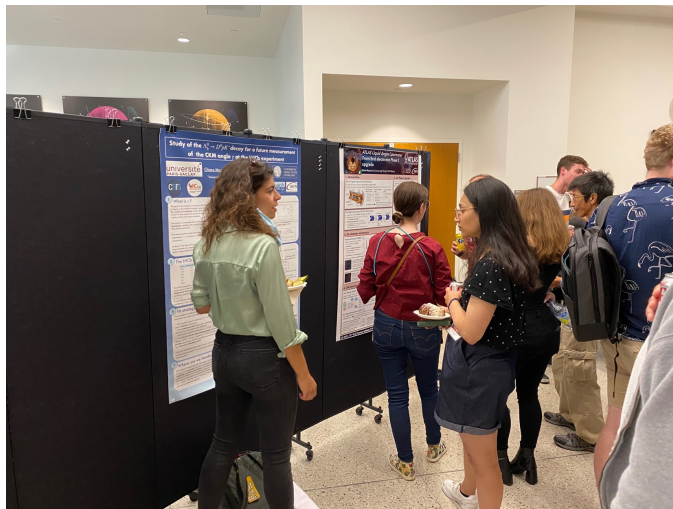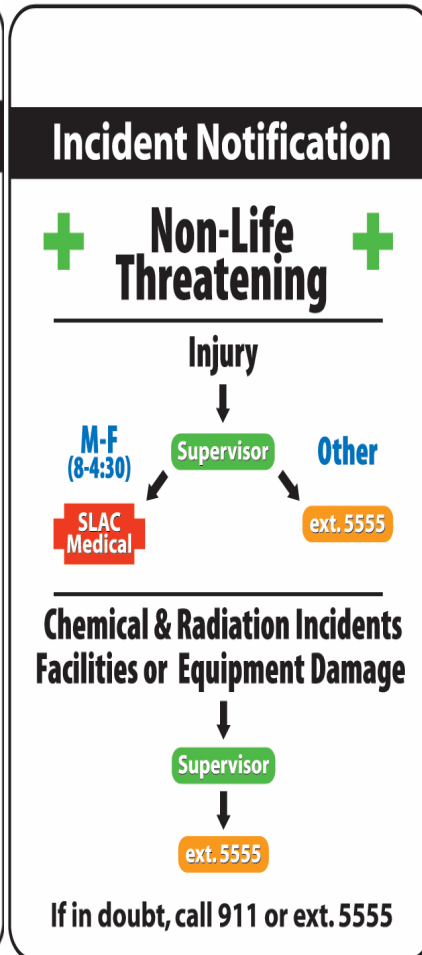# Welcome to the 2024 SLAC SUMMER INSTITUTE !

52ND SLAC SUMMER INSTITUTE

The Art of Precision: Calculations and Measurements

In case of an emergency

Incident Notification

Life Threat
Smoke, Fire, Explosion
Large Hazardous Material Release

↓

Call 911

↓

Call ext. 5555

↓

Supervisor

If in doubt, call 911 or ext. 5555

Incident Notification

Non-Life Threatening

Injury

↓

M-F (8-4:30) → **Supervisor** → Other

SLAC Medical   ext. 5555

Chemical & Radiation Incidents
Facilities or Equipment Damage

↓

Supervisor

↓

ext. 5555

If in doubt, call 911 or ext. 5555

Fire

- Evacuate. Be aware of building exits
- Follow building residents to the assembly area
- Do not leave until you are accounted for, and have been instructed to leave.

Earthquake

- Remain in building: Duck, cover, and hold position
- When shaking stops: Evacuate building via a safe route to the assembly area
- Do not leave until you are accounted for, and have been instructed to leave.
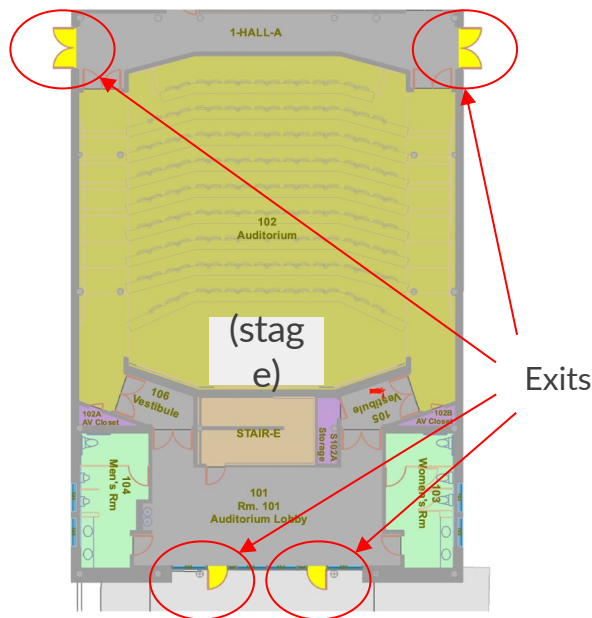
You are here
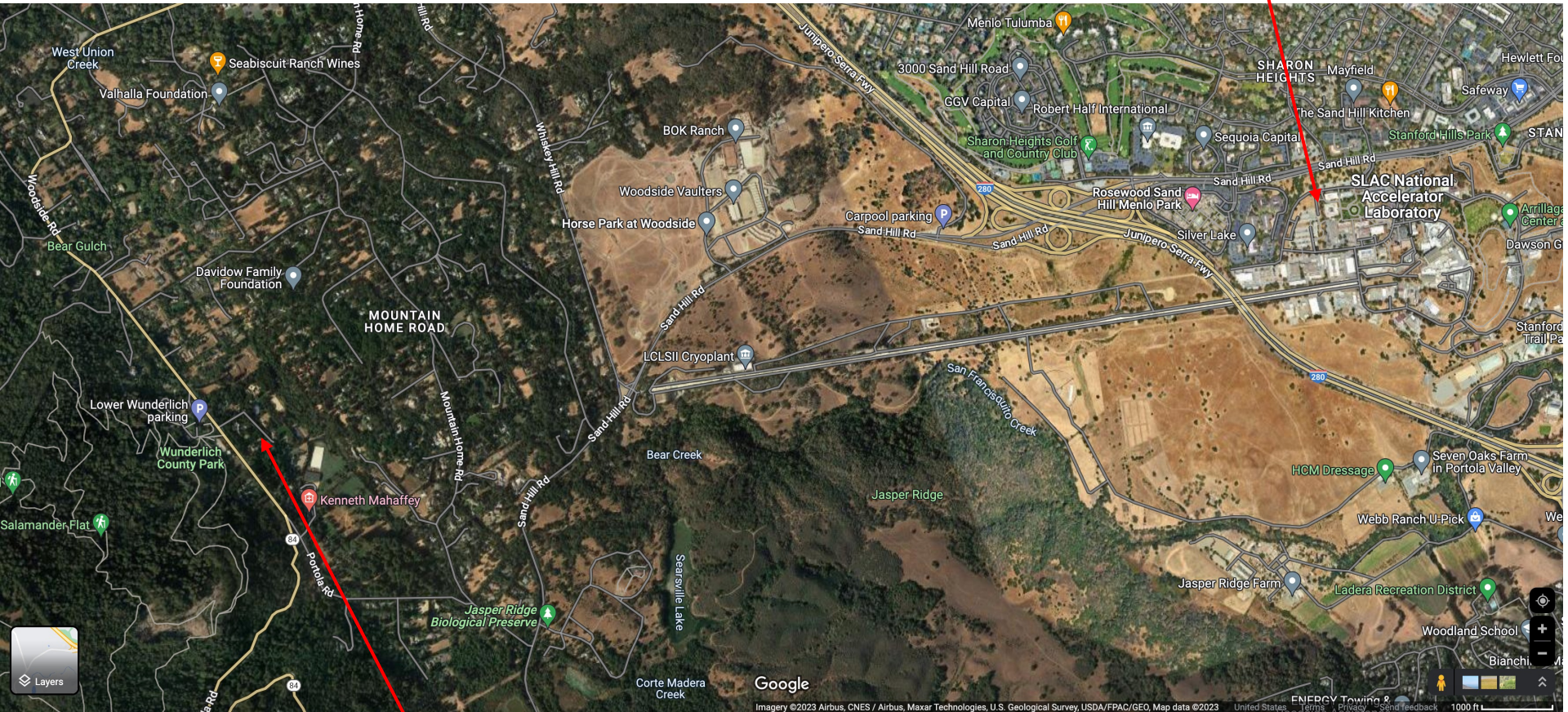
The San Andreas Fault is here

3

Kavli Auditorium emergency evacuation & assembly plan

In case of emergency:

- Evacuate building via marked exits*
- Assemble in Main Quad
- Stay at assembly point until you've been accounted for and told you may leave

*During an earthquake: duck, take cover and hold position until shaking stops, then proceed to evacuate building
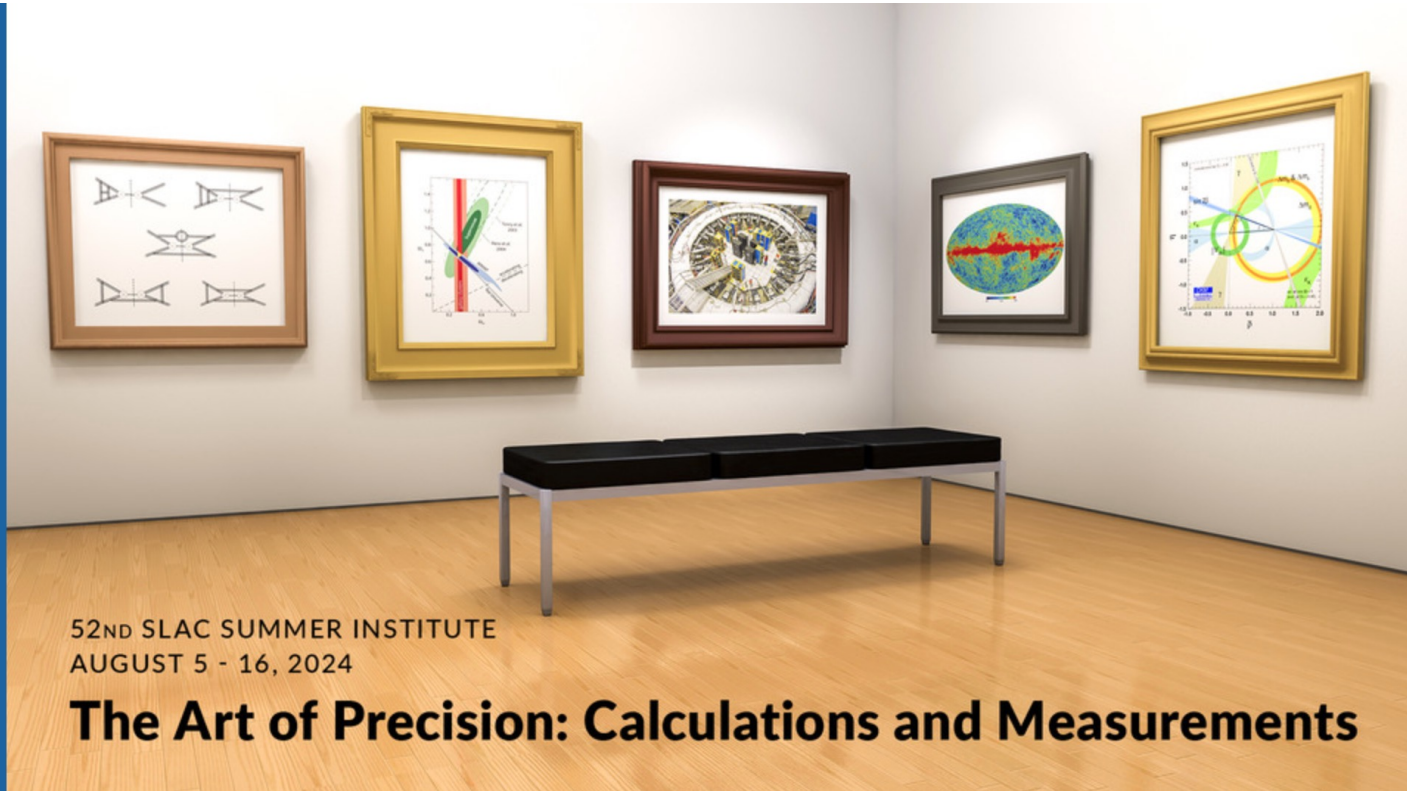

Note the 4 exits in Kavli

Assemble at the Main Quad

SLAC NATIONAL ACCELERATOR LABORATORY

Stanford University | U.S. DEPARTMENT OF ENERGY

Hopefully everything you need to know is on the SSI webpage.. but let's go through a few things……

52ND SLAC SUMMER INSTITUTE
AUGUST 5 - 16, 2024

The Art of Precision: Calculations and Measurements

52nd SLAC Summer Institute (SSI 2024)

Aug 5 – 16, 2024
SLAC
America/Los_Angeles timezone
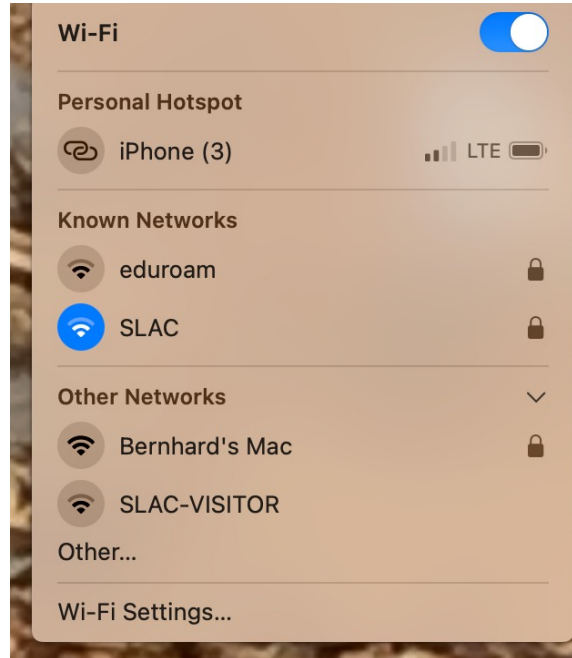
Enter your search term 🔍

Overview

Call for Abstracts

Program Summary

Registration

The SLAC Summer Institute (SSI) is an annual two-week-long Summer School tradition since 1973. The theme of the 52st SLAC Summer Institute is "The Art of Precision: Calculations & Measurements". Precision measurements and theoretical predictions are often critical to illuminating the physics governing the universe we live in. Comparing a precise measurement with a precise prediction is a window to new physics, often at energy scales beyond what can otherwise be probed. Similarly, pushing

Please use eduroam or SLAC-VISITOR networks for wifi

https://it.slac.stanford.edu/support/KB0010023

https://confluence.slac.stanford.edu/display/NetMan/Eduroam+service+at+SLAC

People on Zoom: Just in case, please keep your microphones & cameras turned off – raise your hand at the end of the lecture to ask a question. There are also Q&A sheets for those requiring more detailed answers…more below.

Please read & act accordingly !

Code of Conduct

The SLAC Summer Institute is a community event intended for networking and collaboration as well as learning. We value the participation of everyone and want all attendees to have an enjoyable and fulfilling experience. Accordingly, all attendees are expected to show respect and courtesy to other attendees and to abide by the following Code of Conduct. Any issues can be brought to the confidential attention of the organizers and we thank you for helping make these events welcoming and friendly event.

CODE OF CONDUCT

The community of participants of the SLAC Summer Institute is made up of members from around the globe with a diverse set of skills, personalities, and experiences. It is through these differences that our community experiences success and continued growth. We expect everyone in our community to follow these guidelines when interacting with others both inside and outside of our community. Our goal is to keep ours a positive, inclusive, successful, and growing community.

As members of the community,

- We pledge to treat all people with respect and provide a harassment- and bullying-free environment, regardless of sex, sexual orientation and/or gender identity, disability, physical appearance, body size, race, nationality, ethnicity, and religion. In particular, sexual language and imagery, sexist, racist, or otherwise exclusionary jokes are not appropriate.
- We pledge to respect the work of others by recognizing acknowledgment/citation requests of original authors. As authors, we pledge to be explicit about how we want our own work to be cited or acknowledged.
- We pledge to welcome those interested in joining the community, and realize that including people with a variety of opinions and backgrounds will only serve to enrich our community. In particular, discussions relating to pros/cons of various technologies, programming languages, and so on are welcome, but these should be done with respect, taking proactive measure to ensure that all participants are heard and feel confident that they can freely express their opinions.
- We pledge to welcome questions and answer them respectfully, paying particular attention to those new to the community.
- We pledge to be conscientious of the perceptions of the wider community and to respond to criticism respectfully. We will strive to model behaviors that encourage productive debate and disagreement, both within our community and where we are criticized. We will treat those outside our community with the same respect as people within our community.
- We pledge to help the entire community follow the code of conduct, and to not remain silent when we see violations of the code of conduct. We will take action when members of our community violate this code such as notifying a workshop organizer or talking privately with the person.

This code of conduct applies to all community situations online and offline, including the meetings themself, mailing lists, forums, social media, social events associates with the conference, and one-to-one interactions.

Participants asked to stop any harassing behavior are expected to comply immediately. Attendees violating these rules may be asked to leave the event at the sole discretion of the organizers.

Navigation

- Overview
- Program
- Poster Session
- Registration
- Conference Fee Payment Link
- Dinner Information
- Participant List
- My Conference
  - My Contributions
- Visa Information
- Accommodations
- Code of Conduct
- **Land Acknowledgement**

Support

✉ ssi@slac.stanford.edu

Land Acknowledgement

We recognize that Stanford sits on the ancestral land of the Muwekma Ohlone Tribe. This land was and continues to be of great importance to the Ohlone people. Consistent with our values of community and inclusion, we have a responsibility to acknowledge, honor and make visible the university's relationship to Native peoples.

- Stanford Land Acknowledgement

First Peninsula Inhabitants - Facts about the Ohlone people

Stanford's Relationship with Native Peoples - Honoring Our Relationship

More information about the Stanford University Land Acknowledgement can be found at this web page.

The schedule is available as a spreadsheet & in full detail on Indico

- The morning lectures will be here in the Kavli Auditorium (w/ 1 exception)

- The afternoon Q&A and the Project sessions : Redwood Rooms in ROB

- The reception tonight & later dinners will be on the patio outside of the Redwood Rooms

The indico agenda will have links to lecturer's slides, the video of the presentation (eventually) as well as to the Q&A google docs…

CP Violation & Matter/Anti-matter Asymmetry I (Theory)

11:40

Speaker: Jure Zupan (U. Cincinnati)

1st_Lecture_SSI202…   Video - CP Violation.

Submit questions

Kavli

48

51

53   C
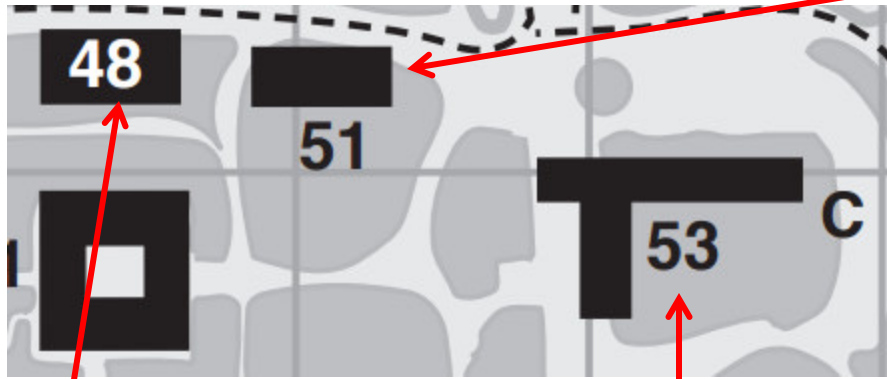
Redwood

SUSB
Lunch

- **The poster session will be in the Redwood Rm (on 8/7)**

Contest

→ <u>The Contest Question</u>: Every year we ask the students to answer a 'light', broad-based question depending on the SSI subject. This year the question is:

"Can any precision measurement clearly & unambiguously exclude the Standard Model? Give an example & explain." (Not, e.g., dark matter).

→ Place your <u>answers</u> in the **pink box** (by 4 PM 8/15) & the organizers will pick a winner who will get a bottle of fine CA bubbly on Friday

To get the flavor: https://indico.cern.ch/event/701949/contributions/3008157/attachments/1699889/2737334/SSI18-Contest.pdf

PM Q&A Sessions

•   These are intended for extensive questions. Those immediately afterward the lectures should be kept short & to the point. Of course, other questions can also be addressed to the speakers directly during the breaks.

•   Note that questions can also be submitted (anonymously) with GoogleDocs via individual links on the SSI program indico agenda & will be answered, given the time limitations, at the end of each talk, in the Q&A sessions or by written answers that will appear within a few days from the lecturer

Projects:

- Since 2013 we have incorporated projects conducted by teams of students into SSI

- Some info already exist on the SSI website & more later today

- These will very likely require in-person attendance

- Teams form around a specific project & try to address the issues

- Teams will present their results on the final TH afternoon (8/15) in Kavli...take a look at past years efforts!

E.g., https://indico.slac.stanford.edu/event/7540/timetable/

SSI 2024 T-Shirts are available for sale !

Only $23 !

(see Glenna out front)

Odds & Ends

- Sign up for the different tours on the SSI webpage (see the schedules for times)

- Be aware of next week's soccer game … sign up via the SSI webpage to play or to watch

  https://indico.slac.stanford.edu/event/8587/page/103-social-events

- Check the SSI "Practical Information" page for info wrt ATMs, after hours access, shuttle buses, Bay Area touring, etc.

Some Tour Details

NOTE: There will be 2 different tours BUT you'll need to sign up for them as numbers are restricted – first come, first served

Klystron Gallery/ATLAS Pixel Upgrade: Limited to 25, ~1 hour. Closed toe shoes required!

Vis Lab: ~30-40 min tours on each of both days limited to 20.

https://indico.slac.stanford.edu/event/8587/page/109-tours

More info on the SSI webpage. If interested, please sign up for these ASAP to reserve your spot !

Group photo at ~10AM tomorrow after 1st presentation
Follow Glenna!