

$0\nu\beta\beta$ AI SUMMER SCHOOL

NEUTRINOLESS DOUBLE BETA DECAY



UCI

UC San Diego





Give a man a fish and you feed him for a day;



Teach a man to fish and you feed him for a lifetime.

Summer School Agenda

Day 1

SATURDAY, 20 JUNE



09:00	→ 09:10	Opening: Welcome Convener: Aobo Li		
09:10	→ 10:30	Lecture 1: Intro to Datasets Speaker: Zepeng Li (University of Hawaii Manoa)	🕒 1h 20m	
10:30	→ 10:40	Break	🕒 10m	
10:40	→ 12:00	Lecture 2: Intro to Machine Learning Speaker: Aobo Li	🕒 1h 20m	
12:00	→ 16:00	Hands-On Session 1: Create Your First AI Model (Lunch Provided)		
16:00	→ 17:00	Panel Discussion: Turning your physics task into AI model		

Summer School Agenda

Day 2

SUNDAY, 21 JUNE



09:00	→ 10:30	Lecture 3: Advanced ML Models Speaker: Vivek Sharma (U. Pittsburgh)	🕒 1h 30m	
10:30	→ 10:40	Break	🕒 10m	
10:40	→ 12:10	Lecture 4: LLM, AI Agent, and Vibe Coding 📌 Speaker: Yue Ma (UC San Diego)	🕒 1h 30m	
12:10	→ 16:00	Hands-On 2: Upgrading Your ML Model with Vibe Coding (Lunch Provided)		
16:00	→ 17:00	Closing: Final Presentation, Award and Closing Remarks		

Parking:

For ISEB - Lot 16 will be the best parking lot. There is a parking permit kiosk at the entrance to the lot.

For Calit2 - Anteater Parking Structure is the best lot, you have to buy ParkbyPlate permit online. Lot 16 will also work.

Please purchase ParkbyPlate permit using the following link: <https://apps.parking.uci.edu/parkbyplate/s/purchase.cfm?code=NPMLWS>

Permit information:

Event Name: NPML2026 Workshop

Event Code: NPMLWS

Event Dates: 6/15/2026 - 6/21/2026

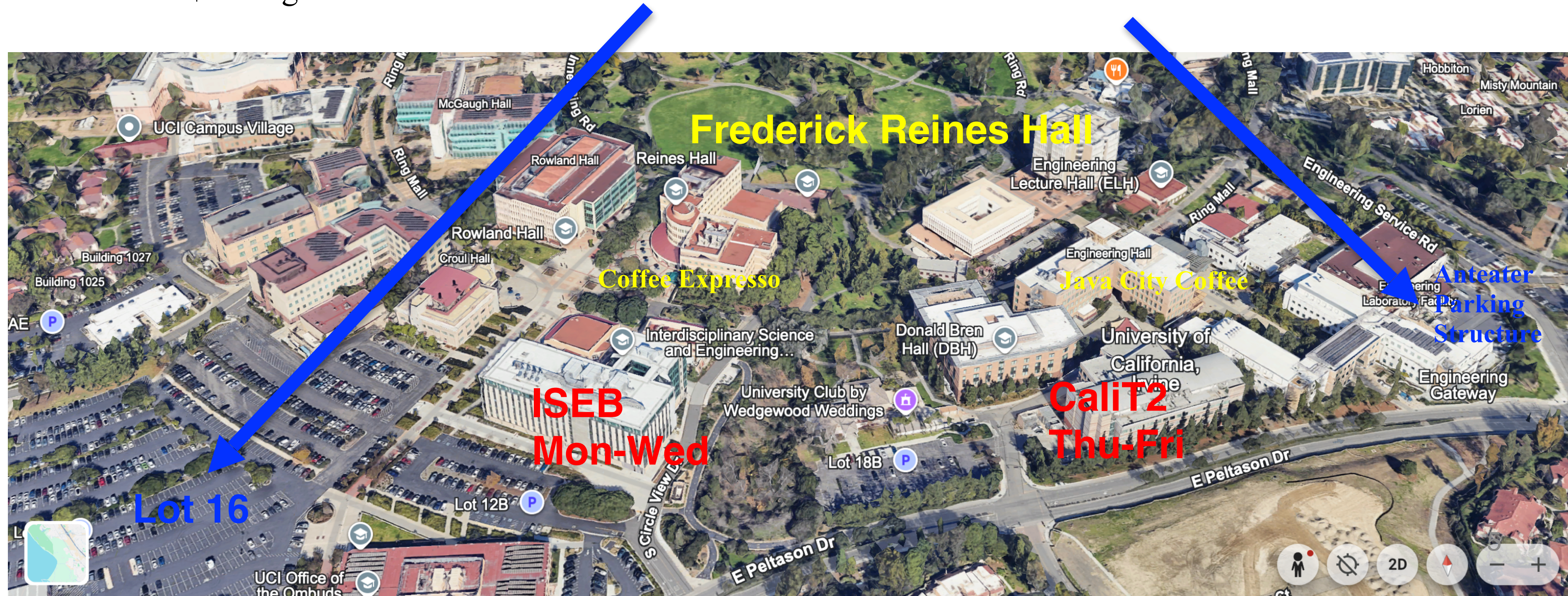
Valid Parking Location: General (Unmarked) Stalls in Lot 16 and General (Unmarked) Stalls the Anteater Parking Structure

Parking Valid Time: All Day

Sales Window: 6/3/2026 - 6/21/2026

Permit Rate: \$16 /registration

**Please Park in a general unmarked stalls
Parking in marked like "AR reserved" stalls
will be ticketed**



Food

Food choices close to the meeting venue:

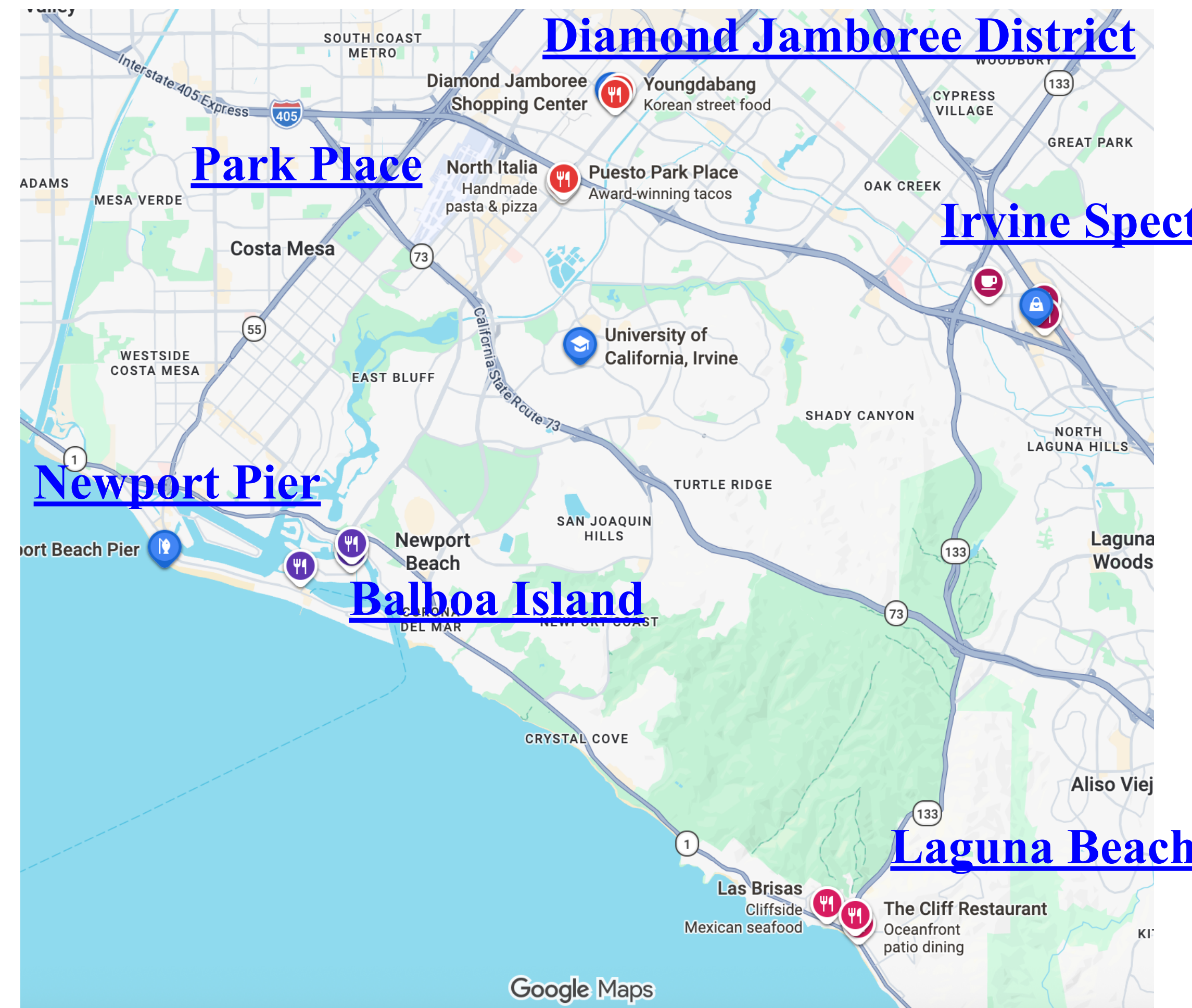
Close to Campus: [University Town Center \(UTC\)](https://maps.app.goo.gl/jS6F2jJN7d78SUsS8). Many restaurants: <https://maps.app.goo.gl/jS6F2jJN7d78SUsS8>



Food

Nearby (times by car)

- [Diamond Jamboree District](#) (10 minutes): Pan-Asian hub with dessert cafés and late hours.
- [Irvine Spectrum Center](#) (20 minutes): Casual to upscale restaurants, patios, and bars in a walkable outdoor complex.
- [Park Place \(Jamboree/405\)](#) (10 minutes): Several sit-down options, including Italian, American steakhouse, and continental food.
- [Newport Pier](#) (25 minutes): A mix of casual beach bars, seafood restaurants, and laid-back spots serving American and Italian fare, all within easy walking distance of the ocean.
- [Balboa Island](#) (20 minutes): A variety of casual cafés, seafood grills, and family-friendly restaurants along Marine Avenue, known for its relaxed atmosphere and signature frozen bananas and Balboa Bars.
- [Laguna Beach](#) (25 minutes): Downtown Laguna Beach features a mix of upscale coastal restaurants, casual cafés, and vibrant bars offering seafood, California cuisine, and international dishes, all within walking distance of the beach and art galleries.



Wi-Fi

- eduroam
- You can also register as an off-campus guest - please see the following site: <https://www.oit.uci.edu/mobile/registration/> .

Computing

NERSC JupyterHub: <https://jupyter.nerisc.gov/hub/login>

After logging in, click node (login node contains GPU too)

	Login Node	Shared GPU Node	Exclusive CPU Node	Exclusive GPU Node	Configurable Job
Perlmutter	stop server	start	start	start	start
Resources	Use a login node shared with other users, outside the batch queues.	Use a single GPU on a node within a job allocation using defaults.	Use your own node within a job allocation using defaults.		Use multiple compute nodes with specialized settings.
Use Cases	Visualization and analytics that are not memory intensive and can run on just a few cores.	Work that fits on a single GPU, and uses at most a quarter of a GPU node's CPU cores and host memory.	Visualization, analytics, machine learning that is compute or memory intensive but can be done on a single node.		Multi-node analytics jobs, jobs in reservations, custom project charging, and more.

A AISummerSchool.ipynb file is prepared

Can be downloaded at Hands-On Session 1

12:00 → 16:00

Hands-On Session 1: Create Your First AI Model (Lunch Provided)



AISummerSchool.ip...

Upload this Jupyter Notebook to your NERSC JupyterHub account and start hacking!