Neutrino 2026 at UC Irvine

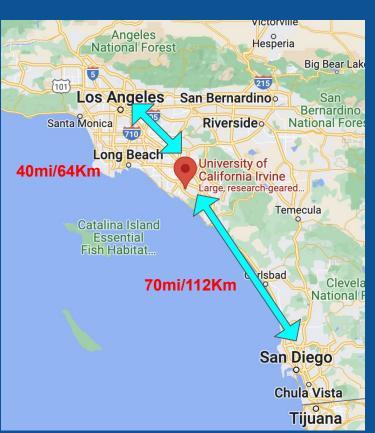


University of California, Irvine

One of the youngest UC campuses, founded in 1965

- Approximately 35,000 students (~30,000 undergraduate, ~5,000 graduate)
- Classified as R1 "Very High Research Activity" in the Carnegie Classification
- 8 Nobel Prizes affiliated with the university
- 50% students first gen; high social mobility index





Neutrino Physics at UC Irvine

Fred Reines and George Cowan discovered the Neutrino in 1956, 70 years before this conference

Reines became the founding dean of UCI's School of Physical Sciences in 1966, conducting many neutrino experiments

UCI has a long history of making pioneering contributions to neutrino detectors: IMB, SNO, Super-Kamiokande, Amanda/IceCube



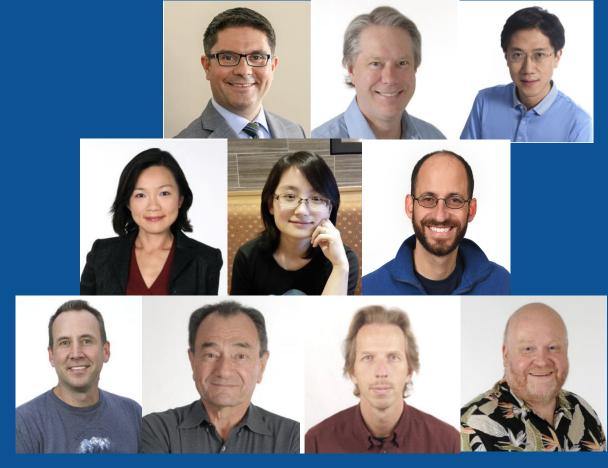


Neutrino Physics at UC Irvine

UCI has maintained a strong interest in Neutrinos to the present:

Kevork Abazajian, Mu-Chun Chen, Shirley Li (join 2023), Michael Ratz (theory: models, phenomenology, cross section, astro/cosmo)

Henry Sobel, Steve Barwick, Jianming Bian, Pedro Ochoa-Ricoux, Michael Smy, Mark Vagins (experimental: SK/T2K, Daya Bay, DUNE, NOvA, JUNO, IceCube/AMANDA)



Neutrino 2026 at UCI: Co-Chairs



Mu-Chun Chen, Co-Chair

- Theorist working on origin of neutrino masses and mixing, baryogenesis and leptogenesis, Grand Unified Theories, and other BSM Physics
- Several seminal contributions to theory of neutrino masses and mixing, and leptogenesis; Proposed Group Theoretical Origin of CP Violation a current hot topic
- Humboldt Research Fellowship; IAC
- Frequent invited speaker on theory of neutrino masses and mixing; more than 200 presentations worldwide, including recent Snowmass Theory Frontier conference
- Co-convenor, DoE Intermediate Neutrino Program Theory Working Group, 2015
- Co-Chair for WIN 2017 at UCI
- Chair of LOC for APS CUWiP2020 at UCI (~360 attendees); (Elected) Chair of NOC-L for APS CUWiP 2023 overseeing 15 sites, >2000 attendees nationwide
- Snowmass Co-Convener, CEF3: Diversity and Inclusion Topical Group
- Associate Dean for School of Physical Sciences



Michael Smy, Co-Chair

- Few MeV-100 MeV event reconstruction and selection, triggering of the lowest energy electron events in Super-Kamiokande
- Precise calibration of the Super-Kamiokande detector at few MeV-20 meV
- development of Gd doping for large water Cherenkov detectors, in particular measurement of the impact of Gd doping and water filtration methods on optical transparency
- Leading the 8B solar neutrino analysis in Super-Kamiokande, in particular oscillation analysis (of Super-Kamiokande and other solar neutrino experiments), energy dependence of MSW adiabatic conversion, earth matter effects
- New techniques to identify and remove cosmogenic radioactivity as a background to solar and supernova neutrinos
- Search for the diffuse supernova neutrino background with world-leading sensitivity
- Co-Chair for WIN2017 at UCI

Great Enthusiasms to Host Neutrino 2026 at UCI: LOC (Several volunteered/supported + more...)



Pedro Ochoa Ricoux (E)

- Reactor and accelerator neutrinos (Daya Bay, JUNO, DUNE)
- R&D for novel detection techniques



Jianming Bian (E)

- NoVA, DUNE, SK
- Novel approach for data analyses with Deep Learning



Michael Ratz (T)

- RGEs for neutrino mass operators
- Modular flavor symmetries for neutrino mixing
- Dirac Leptogenesis

Past/Upcoming Major Conferences at UCI

SUSY 2006 - 14th International Conference on Supersymmetry and the Unification of Fundamental Interactions (~300) Chair: Feng

WIN2017 - 26th International Workshop on Weak Interactions and Neutrinos (~200), Co-Chairs: Chen, Smy

CUWiP 2020 - APS Conference for Undergraduate Women in Physics (~360 participants - largest site in conference history), Chair: Chen

PASCOS 2023 - 28th International Symposium on Particles, Strings and Cosmology, Chair: Ratz



Venue - UCI Conference Center, Pacific Ballroom ABCD

Plenary Session:

- UCI Conference Center:
 Pacific Ballrooms A+B+C+D:
 hold ~850 people
- Additional meeting rooms for overflow: Crystal Cove Auditorium: 425; Doheny Beach ABCD: 417
- Complimentary WiFi

Poster Session:

 Hallways and outdoor space in Pacific Ballrooms

There are many options for food at walking distance from these venues



Additional Conference Facilities

Public Lecture:

 Irvine Barclay Theater (venue for annual Reines Lectures)

Additional Conference Facilities

 Interdisciplinary Science and Engineering Building (in-kind)



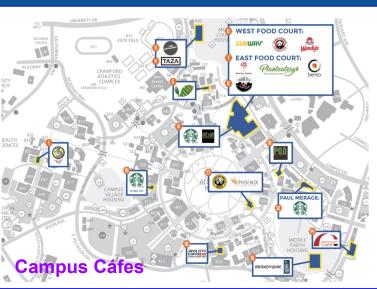






Nearby Eateries for All Budgets





Location, Airport, Local Transportation

UCI is located near 3 major airports:

- Los Angeles International Airport (LAX): world's third largest airport in terms of passenger traffic
 - ~40 miles, 1-2 hour car ride, taxi/uber ~70 USD
- Orange County Airport (SNA): serves all major US cities
 - ~4 miles, ~10 minute car ride, taxi/uber ~15 USD
 - Local hotels provide free shuttle service to/from
- San Diego International Airport (SAN): serves all major US cities, as well as Canada, Mexico, Germany and the UK
 - ~80 miles, 1-2 hour car ride, taxi/uber ~110 USD

Also very close to the Long Beach and Ontario airports.



LAX serves over 45 countries. The airport is undergoing a major modernization in preparation for the Olympic Games that is expected to be completed by late 2023

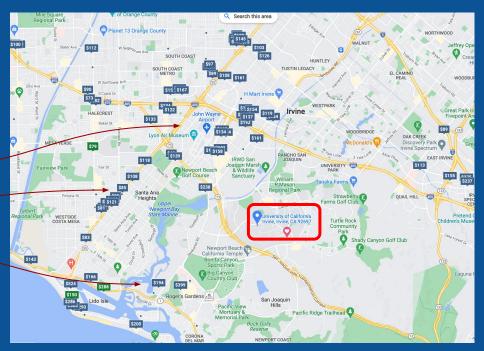
Accommodations

There are <u>many</u> hotels near UCI spanning a wide range of prices:

- Around the Orange County airport:
 - From Travelodge to Hyatt
- In Downtown Costa Mesa
- Near "Fashion Island" (a local high-end mall), the beach and other attractions:
 - For example, Newport Beach Marriott, Holiday Inn Express Newport Beach

Important to note that:

- Already have <u>negotiated rates</u> with many of these hotels, and could very likely get more for Neutrino 2026
- Most local hotels near UCI provide free shuttle service
- For WIN2017, charter buses provided transportation to UCI





Just Steps



Access and Inclusion

Financial Support for Early Career attendees (what we did at WIN17)

Accessibility accommodations

Inclusive Bathrooms, Lactation Rooms, Quiet Rooms: designated facilities available in Conference Center, ISEB, and multiple campus buildings nearby

LEED certified buildings; UCI ranked #1 Greenest Campus in US

Cost Considerations: reasonable cost made possible with

- Campus conference facilities incurring lower cost than off-site facilities
- Convenient major airports nearby
- Local hotels, eateries accommodating all budgets
- Local hotels providing free shuttle services
- Past major conferences funded through NSF, DoE, Industry, and UCI

