

ICOLS **at Berkeley**

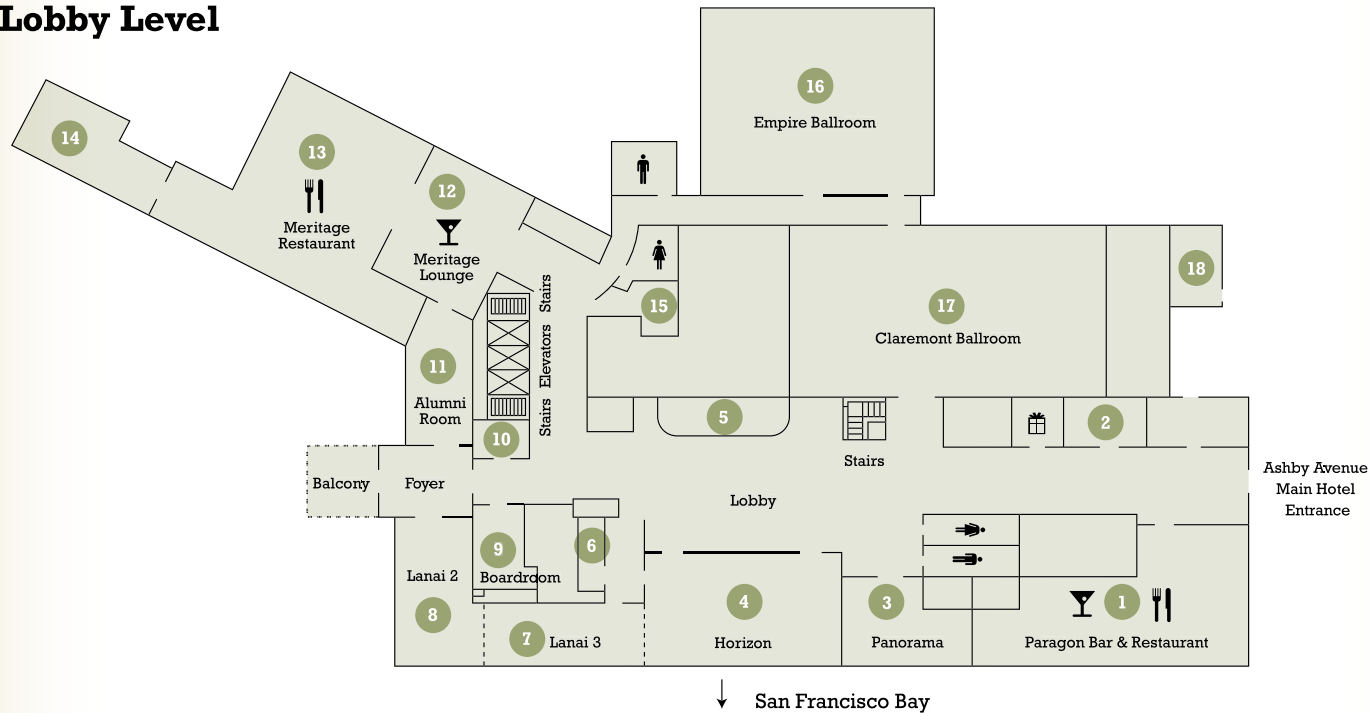
The 21st International Conference
On Laser Spectroscopy at
University of California, Berkeley
June 9 - 14, 2013
Claremont Hotel

Official Program

Conference Schedule-at-a-Glance

	Sunday June 9	Monday June 10	Tuesday June 11	Wednesday June 12	Thursday June 13	Friday June 14	
8:00 AM		Registration Lobby					
8:30 AM		Coffee Claremont Room					
8:50 AM		Presentations Empire Room					
9:30 AM		Hänsch Monroe	Hinds González-Férez	Corkum Hommelhoff	Lukin Greiner	Wineland Amy-Klein	
10:00 AM		Coffee Break Claremont Room					
10:30 AM		Presentations Empire Room					
11:00 AM		Fajans Hori	Udem Diddams	Krausz Lisdat	Lam Eikema	Vuletic Roos	
11:30 AM							
12:00 PM							
12:30 PM		Lunch Horizon, Lanai 2 & 3, Meritage	Lunch Horizon, Lanai 2 & 3, Meritage	Boxed Lunch	Lunch Horizon, Lanai 2 & 3, Meritage	Boxed Lunch	
1:00 PM							
1:30 PM							
2:00 PM		Presentations	Presentations	Excursions Shuttles depart from the main entrance of hotel	Presentations		
2:30 PM		Davidson Chu	Haroche Hogan		Ye Bowen		
3:00 PM	Coffee Break	Group Photo	Coffee Break				
3:30 PM	Poster Session Horizon, Lanai 2 & 3,		Presentations				
4:00 PM	Registration Lobby	Coffee Break			Presentations		
4:30 PM	Reception & Poster Session Horizon, Lanai 2 & 3 Sponsored by Raytheon				Schleier-Smith Sagi		
5:00 PM			Shuttles to UC Berkeley Campus				
5:30 PM			Public Lecture Eric Cornell 1 Pimentel UC Berkeley				
6:00 PM					Reception Horizon, Lanai 2 & 3		
6:30 PM							
7:00 PM							
7:30 PM				Banquet Claremont Room			
8:00 PM							
8:30 PM			Shuttles to Hotel				

Lobby Level



- 1. Paragon Bar & Restaurant
- 2. Gift Shops
- 3. Panorama
- 4. Horizon
- 5. Front Desk/Concierge
- 6. Bell Desk
- 7. Lanai 3
- 8. Lanai 2
- 9. Boardroom

- 10. Alumni Office
- 11. Alumni Room
- 12. Meritage Lounge
- 13. Meritage Restaurant
- 14. Meritage Private Dining
- 15. Business Center/ATM
- 16. Empire Ballroom
- 17. Claremont Ballroom
- 18. Human Resources

Spa Level

(Below Lobby Level – Not Shown)

- Spa Claremont
- Spa Retail
- Spa Wing Guestrooms

Garden Level

(Below Spa Level – Not Shown)

- Salon
- Sales & Catering
- Carriage Door Entrance
- Access to:
 - The Club
 - Pool Arbor
 - Bayview Café

Sunday, June 9

- 4 pm Registration Opens, Lobby
- 5-7:30 pm **POSTER SESSION #1** Horizon, Lanai 2 & 3
Reception sponsored by Raytheon

Monday, June 10

- 8:00 am Registration Opens, Lobby
- 8:30 am **Coffee** Claremont Ballroom
- 8:50-9:45 am **KEYNOTE** Empire Ballroom
Theodore Hansch University of Munich & Max Planck Institute of Quantum Optics: *Laser spectroscopy and frequency combs*
- 9:45-10:30 am **Christopher Monroe** Joint Quantum Institute/UMD
Quantum networking with atoms and photons
- 10:30-11 am **Coffee Break** Claremont Ballroom
- 11-11:45 am **Joel Fajans** UC Berkeley
Spectroscopy of antihydrogen atoms
- 11:45 am-12:30 pm **Masaki Hori** Max Planck Institute of Quantum Optics
Two-photon laser spectroscopy of antiprotonic helium atoms and the antiproton-to-electron mass ratio
- 12:30-2 pm **Lunch** Horizon, Lanai 2 & 3, Meritage Restaurant
- 2-2:45 pm **Nir Davidson** Weizmann Institute of Science
Long coherence times with dense ultra-cold atomic ensembles
- 2:45-3:30 pm **Steven Chu** Stanford University
Presentation Title TBD
- 3:30-4 pm **Coffee Break** Claremont Ballroom
- 4-6:30 pm **POSTER SESSION #2** Horizon, Lanai 2 & 3

Tuesday, June 11

8:00 am	Registration Opens, Lobby
8:30 am	Coffee Claremont Ballroom
8:50-9:45 am	PRESENTATIONS Empire Ballroom Edward Hinds Imperial College London <i>Testing fundamental physics with cold molecules</i>
9:45 am-10:30 am	Rosario González-Férez Universidad de Granada <i>Nonadiabatic effects in long-pulse mixed-field orientation of polar molecules</i>
10:30-11 am	Coffee Break Claremont Ballroom
11 am-11:45 am	Thomas Udem Max Planck Institute of Quantum Optics <i>Precision spectroscopy of atomic hydrogen</i>
11:45 am-12:30 pm	Scott Diddams National Institute of Standards & Technology (NIST) <i>Optical frequency division with reduced quantum noise</i>
12:30-2 pm	Lunch Horizon, Lanai 2 & 3, Meritage Restaurant
2-2:45 pm	Serge Haroche Ecole Normale Supérieure and Collège de France <i>Manipulating quantum fields in cavities</i>
2:45-3:30 pm	Jason Hogan Stanford University <i>Precision atom interferometry in a 10 meter tower (Hot Topic)</i>
3:30-4 pm	Coffee Break Claremont Ballroom
5:30 -9:15 pm	SHUTTLE TO UC BERKELEY CAMPUS Shuttles will run from the Claremont Hotel main entrance to the UC Berkeley campus every 20 minutes.
7-8:30 pm	PUBLIC LECTURE UC Berkeley Campus, 1 Pimentel Hall (see icols.berkeley.edu for map/directions) Eric Cornell NIST/University of Colorado <i>Lazy vs. Sloppy: The Epic Story of Energy, Entropy, Temperature, the Ultimate Fate of the Universe and the Role of Divine Intervention</i>

Shuttles to hotel leave after the lecture.

Wednesday, June 12

8:00 am	Registration Opens, Lobby
8:30 am	Coffee Claremont Ballroom
8:50-9:45 am	PRESENTATIONS Empire Ballroom Paul Corkum University of Ottawa & National Research Council Canada <i>Attosecond pulses and high harmonic spectroscopy</i>
9:45-10:30 am	Peter Hommelhoff University of Erlangen and MPQ <i>Ultrashort laser oscillator pulses meet nano-structures: from attosecond physics at metal tips to dielectric laser accelerators</i>
10:30-11 am	Coffee Break Claremont Ballroom
11-11:45 am	Ferenc Krausz Max-Planck-Institute of Quantum Optics <i>Real-time observation and control of electron motion</i>
11:45 am-12:30 pm	Christian Lisdat Physikalisch-Technische Bundesanstalt <i>Comparison of Sr lattice and Yb+ single ion clocks at the 10-17 level (Hot Topic)</i>
12:30-2 pm	Boxed Lunch EXCURSIONS (pre-registration only) <i>Board shuttles for excursions at main entrance to hotel</i> Gourmet Ghetto — 12:30 pm board, 12:45 pm departure, ≈ 3:30 pm return to hotel Lick Observatory — 1 pm board, 1:15 pm departure, ≈ 8:30 pm return to hotel Alcatraz — 1:15 pm board, 1:30 pm departure, ≈ 7 pm return to hotel

Thursday, June 13

8:30 am	Coffee Claremont Ballroom
8:50-9:45 am	PRESENTATIONS Empire Ballroom Mikhail Lukin Harvard University <i>Quantum optics with nanophotonic systems</i>
9:45-10:30 am	Markus Greiner Harvard University <i>A close-up of synthetic quantum matter</i>
10:30-11 am	Coffee Break Claremont Ballroom
11-11:45 am	Ping Koy Lam Australian National University <i>Gradient echo quantum memory using cold atoms</i>

Thursday, June 13 (contd.)

- 11:45 am-12:30 pm **Kjeld Eikema** VU University, LaserLaB
Ramsey-comb spectroscopy (Hot Topic)
- 12:30-2 pm **Lunch** Horizon, Lanai 2 & 3, Meritage Restaurant
- 2-2:45 am **Jun Ye** JILA, University of Colorado
Exotic quantum matter with polar molecules - a lattice spin model
- 2:45-3:05 pm **Warwick Bowen** The University of Queensland
Sub-diffraction limited quantum imaging of a living cell (Hot Topic)
- 3:30-4 pm **Coffee Break** Claremont Ballroom
- 4-4:45 pm **Monika Schleier-Smith** LMU Munich / Max Planck Institute of Quantum Optics
Probing collective atomic states for quantum metrology and more
- 4:45-5:50 pm **Yoav Sagi** JILA, University of Colorado
Probing local quantities in a strongly interacting Fermi gas
- 6:30 pm **RECEPTION** Horizon, Lanai 2 & 3
BANQUET Claremont Ballroom
Charles Townes UC Berkeley
Y. Ron Shen UC Berkeley
Erwin Hahn UC Berkeley
- Poster Award Presentations

Friday, June 14

- 8:30 am **Coffee** Claremont Ballroom
- 8:50-9:45 am **PRESENTATIONS** Empire Ballroom
- David Wineland** National Institute of Standards & Technology (NIST)
Experiments at NIST on quantum control of trapped ions
- 9:45-10:30 am **Anne Amy-Klein** Université Paris 13 - LPL
Ultra-stable long distance optical frequency distribution using the Internet fiber network and application to high-precision molecular spectroscopy
- 10:30-11 am **Coffee Break** Claremont Ballroom
- 11-11:45 am **Vladan Vuletic** MIT
Strongly interacting photons
- 11:45 am-12:30 pm **Christian Roos** IQOQI Innsbruck
Single photon recoil spectroscopy with trapped ions
- 12:30-2 pm **Boxed Lunch**



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MogLabs
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NIST
Princeton Instruments
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