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AGENDA: APRIL 11, 2018

6pm: Reception / Social hour

7pm: Dinner **8pm:** Presentation

St Gregory Church

2215 East Colorado Boulevard

Pasadena

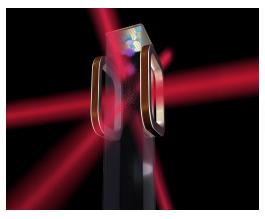
Meal: \$35 (\$45 after April 8) \$10 for Student Members* (\$20 after April 8) (*Discount applies to **OSSC** full-time student Members)

Registration & Details

OSSC and IEEE GRSS and Photonics Chapters Present Special Lecture & Dinner Event

Laser Cooling & Trapping on ISS

April 11, 2018, 6:00-8:00 PM St Gregory Church





Microgravity offers a wealth of advantages for studies of ultra-cold ato mic gases and their applications. These include the ability to achieve exceptionally low temperatures via expansion into very weak traps, which don't need to be supported against gravity and the ability to achieve very long interaction times with samples that have been released from traps. The Cold Atom Laboratory (CAL) will be a flexible, multi-user ultra-cold atom facility that will enable the precise study of quantum gases at effective temperatures well below the coldest achievable on Earth. CAL will launch to the International Space Station in early 2018, giving scientists a unique window into the quantum world. CAL is supported by SLPS and ISS-PO. Jet Propulsion Laboratory, and the California Institute of Technology.



Rob Thompson Biography:

Dr. Rob Thompson developed the mission concept for the Cold Atom Lab, and is the Project Scientist for the project. He has over twenty-five years of research experience and numerous publications in atomic and molecular physics, laser physics, and cavity quantum electrodynamics. His current

research interests include studies of degenerate quantum gases in microgravity; space-based quantum sensors; and optical clocks. He received his Ph.D. from the University of Texas at Austin.