



**WELCOMES YOU TO ATTEND THE PRESENTATION ON:**

***The Current and the Future State of Robotic Space Exploration***

**Date:** **Wednesday, November 16, 2016**

**Time:**

6:30 PM – Pizza + Social Networking  
7:00 PM – Presentation

**Location:**

Jacaranda Hall (JD) Room 4440  
College of Engineering & Computer Science  
California State University, Northridge  
18111 Nordhoff Street  
Northridge, CA 91330

**No Fee:** Free pizza and light refreshments  
from 6:30 PM

**RSVP at** [alkalai.eventbrite.com](http://alkalai.eventbrite.com)

by Nov 15, 2016 for food/drink count

**Information:** Mr. Ron Olch, Chapter Chair at  
[ronald.h.olch@ieee.org](mailto:ronald.h.olch@ieee.org)

**Speaker: Dr. Leon Alkalai**



**JPL Tech Fellow**  
Member of the International Academy of  
Astronautics

**Abstract**

This presentation will give a high level overview of recent scientific discoveries and achievements in robotic space exploration across our Solar System. The future directions for robots to explore space are very exciting and promising: from exploring the oceans of Europa to imaging (one day) continents on Earth-like ExoPlanets at neighboring stars in our galaxy.

**Speaker Biography**

Leon Alkalai received his PhD in Computer Science from UCLA in 1989 and has been working at JPL ever since. For the first 14 years of his career Leon was a leader in Advanced Avionics Systems, Micro-Systems, Micro/Nano Spacecraft and related technologies. He led JPL's Center for Integrated Space Microsystems (CISM) which was developing highly integrated "Systems on A Chip" and pioneering new micro and nano satellites.

For the past 13 years, Leon has been in the forefront of JPL's competed missions' project formulation as a Manager and a Business Capture Lead. Leon was the successful Capture Lead for both the GRAIL mission to the Moon: awarded in 2007 and launched in 2011; and then the InSight mission to Mars: awarded in 2012 and to be launched in 2018. Both competitions were part of NASA's Discovery Program in Solar System Exploration. In 2012, Leon received the NASA Individual Distinguished Achievement Medal for the successful formulation of the GRAIL mission to map the gravity field of the Moon. Leon is currently leading JPL's Discovery proposal to explore and map the surface of Venus using advanced radar technology.

In the past 3 years, Leon has also been leading a new pioneering effort at JPL to formulate the next robotic mission to explore the Interstellar Medium (ISM), following the detection of the solar Heliopause by the Voyager-1 robotic spacecraft (2013). Leon also leads JPL's Medical Engineering Forum (MEF) a pilot project to apply space technology to medical engineering.

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