



50 ✦ YEARS ✦ IN ✦ SPACE

International Aerospace Conference Celebrating Fifty Years of Space Technology

California Institute of Technology – Pasadena, California

September 19 – 21, 2007

Conference Chairs: **Jean-Lou Chameau**, *President, Caltech*; **Alexis Livanos**, *President, NGST*; **Charles Elachi**, *Director, JPL*

Wednesday, 9/19/2007
Athenaeum, Caltech

6:00 pm **Welcome Reception**
Hosts: Ares Rosakis – Director, GALCIT, Theodore von Kármán Professor of Aeronautics, Caltech
Dwight Streit – *Vice President, Northrop Grumman Space Technology*

Thursday, 9/20/2007
Beckman Auditorium,
Caltech

7:30 am Registration and Continental Breakfast (Courtyards surrounding Beckman Auditorium)

8:30 am **Introduction and Welcome**
Jean-Lou Chameau – *President, California Institute of Technology*
Keynote Speaker: Ronald D. Sugar – *Chairman, Northrop Grumman Corporation*

9:00 am **The Story of Space Exploration**
Session Chair: Paul Dimotakis – Chief Technologist, JPL; Northrop Professor of Aeronautics, Caltech
Harrison “Jack” Schmitt – *Astronaut, Former U.S. Senator*
Ed Stone – *Director Emeritus, Jet Propulsion Laboratory; David Morrisroe Professor of Physics, Caltech*
Gentry Lee – *Chief Engineer for the Planetary Flight Systems Directorate, Jet Propulsion Laboratory*

10:15 am Break and Model Exhibit

10:45 am **Panel Discussion: Space and the Environment, Sensible Space Investment**
Panel Introduction and Welcome: Charles Elachi – Director, Jet Propulsion Laboratory
Moderator: Miles O’Brien – Chief Technology and Environment Correspondent, CNN
Panelists: William F. Ballhaus, Jr. – President and CEO, Aerospace Corporation
Frank Fernandez – *Director Emeritus, Defense Advanced Research Projects Agency (DARPA)*
Abdul Kalam – *12th President of India, Distinguished Professor, Indian Institute of Technology*
Charles Kennel – *Professor, and Director Emeritus, Scripps Institution of Oceanography, UC San Diego*
Burt Rutan – *Founder, President, and CEO, Scaled Composites, LLC*
Andrea Seastrand – *Executive Director, California Space Authority, Former U.S. Congresswoman*

Beckman Auditorium
environs

12:30 pm Lunch and Model Exhibition (Surrounding courtyards and Beckman West Lawn)

1:45 pm **The Future of Space Exploration I**
Session Chair: TBA
Michael Griffin – *Administrator, NASA*
Jean-Jacques Dordain – *Director, General European Space Agency*
Yannick d’Escatha – *President, Centre National d’Études Spatiales*
Abdul Kalam – *12th President of India, Distinguished Professor, Indian Institute of Technology*

3:10 pm Break and Model Exhibit

3:40 pm **The Future of Space Exploration II**
Session Chair: Tom Romesser – Vice President, Northrop Grumman Space Technology
Ronald Sega – *Under Secretary, United States Air Force; Astronaut*
Masato Nakamura – *Executive Director, Institute of Space & Astronautical Science (ISAS/JAXA)*
France Córdova – *President, Purdue University*
Ares Rosakis – *Director, GALCIT, Theodore von Kármán Professor of Aeronautics, Caltech*

5:05 pm Break

Ritz-Carlton Hotel,
Pasadena

6:30 pm **Reception and Conference Banquet**
Host: Jean-Lou Chameau – President, California Institute of Technology
Keynote Speaker: John C. Mather – *2006 Nobel Laureate in Physics; James Webb Space Telescope Senior Project Scientist, NASA Goddard Space Flight Center*

Friday, 9/21/2007
Beckman Auditorium,
Caltech

7:30 am Continental Breakfast

8:30 am **Special Session**
A Tribute to Simon Ramo: Alexis Livanos – *President, Northrop Grumman Space Technology*

9:00 am **The Future of Space Exploration: Industry Perspective**
Session Chair: Robert S. Dickman – Executive Director, American Institute of Aeronautics and Astronautics

Elon Musk – *CEO, SpaceX*
David Thompson – *Chairman and CEO, Orbital Sciences Corporation*
Joanne Maguire – *Executive Vice President, Space Systems, Lockheed Martin Corporation*
David Whelan – *Corporate Vice President, Boeing Corporation*

10:25 am Break

10:55 am **The Future of Space Exploration: Academic and Scientific Perspective**
Session Chair: Eugene Tattini – Deputy Director, Jet Propulsion Laboratory
Berrien Moore III – *Director, Institute for the Study of Earth, Oceans, and Space, University of New Hampshire*
Jonathan Lunine – *Professor of Planetary Sciences and Physics, University of Arizona*
Michael Werner – *Project Scientist, Jet Propulsion Laboratory*

Closing Keynote Speaker: Neil deGrasse Tyson – *Director, Hayden Planetarium*

12:30 pm Close of Conference