

LUNAR SCIENCE CONFERENCE

*To Explore the Full Spectrum of Lunar Science
Of the Moon, On the Moon, and From the Moon*

Sunday, July 20, 2008

Eagle Room, Building 943

1:00–5:00 p.m. *Public Event Celebrating Apollo Landing*

Foyer, Building 17

5:30 p.m. Registration

Monday, July 21, 2008

Foyer, Building 3

8:00 a.m. Registration

Welcome Ballroom

8:30 a.m. Pete Worden: Director, NASA Ames Research Center
Welcome

8:50 a.m. NASA Associate Administrator SMD
Science in the NASA Return to the Moon

9:10 a.m. David Morrison: Director, NASA Lunar Science Institute
NASA Lunar Science Institute

9:30 a.m. ESMD Representative
Exploration Systems Mission Directorate

9:50 a.m. BREAK

Session I: Ballroom

OF THE MOON: GEOSCIENCES

10:30 a.m. Pieters C. *
The NAS Report on the “Scientific Context for Exploration of the Moon”

10:50 a.m. Spudis P. D. *
[*Science and the Return to the Moon: The Vision for Space Exploration*](#) [#2096]

11:10 a.m. Chaikin A. *
Broader Implications of the Moon for Human Society

11:30 a.m. LUNCH/POSTER VIEWING

* Denotes speaker

Monday, July 21, 2008 (continued)

1:30 p.m. CONTRIBUTED SESSIONS:

Ballroom [Missions and International Lunar Exploration](#)

Patio Room [Lunar Sortie Science Opportunities](#)

North Room [Entrepreneurial and Commercial Opportunities](#)

2:30 p.m. BREAK

Session II: OF THE MOON: MISSIONS

Ballroom

3:00 p.m. Kato M. Takizawa Y. Sasaki S. SELENE Project Team
[The Kaguya \(SELENE\) Mission: Present Status and Science](#) [#2038]

3:45 p.m. Vondrak R. *
Lunar Reconnaissance Orbiter

3:45 p.m. Colaprete A. Briggs G. Ennico K. Wooden D. Heldmann J. Sollitt L. Asphaug E.
Korycansky D. Schultz P. Christensen A. Galal K. LCROSS Team
[An Overview of the Lunar Crater Observation and Sensing Satellite \(LCROSS\) Mission — An ESMD Mission to Investigate Lunar Polar Hydrogen](#) [#2012]

4:00 p.m. Stockman S. *
Education/Public Outreach for the Lunar Reconnaissance Orbiter (LRO) and the Lunar Crater Observation and Sensing Satellite (LCROSS)

4:15 p.m. Green J. *
Future Moon Mission Opportunities

4:30 p.m. Cohen B. A. * ILN Science Definition Team MSFC/APL ILN Engineering Team
[The International Lunar Network Anchor Nodes Mission: An Update](#) [#2051]

4:45 p.m. Angelopoulos V. Silbeck D. G. Farrell W. M. Delory G. T. Halekas J. Lillis R. Brain D.
Khurana K. K. Russell C. T. Kivelson M. G. Murphy N. Shriver D. Travnicek P.
Bonnell J. Larson D. McFadden J. Glassmeier K.-H.
[ARTEMIS: A Two-Satellite Mission to Study Moon in 2010–2012 and Beyond](#)

5:00 p.m. [POSTER SESSION](#)

Tuesday, July 22, 2008

Session III: ON THE MOON

Ballroom

8:30 a.m. Young L. *
Humans in Long Term Lunar Exploration

8:50 a.m. Ferl R. * Paul A.-L.
[Plants in Long Term Lunar Exploration](#)

9:10 a.m. Wegeng R. *
Long Term Sustainability on the Moon

9:30 a.m. BREAK

10:30 a.m. CONTRIBUTED SESSIONS:

Ballroom [Life Sciences on the Moon](#)

Patio Room [Effects of Exploration of the Lunar Environment](#)

North Room [Lunar Plasmas](#)

11:30 a.m. LUNCH/POSTER VIEWING

Tuesday, July 22, 2008 (continued)

Ballroom

LEAG COMMUNITY MEETING

1:30 p.m. The Lunar Exploration Roadmap Overview. Speaker: Clive Neal

Supporting abstract:

Neal C. R. LEAG Executive Committee

[The Lunar Exploration Roadmap. Exploring the Moon in the 21st Century: Themes, Goals, Investigations, and Priorities, 2008](#) [#2109]

1:50 p.m. Theme 1: Pursue Scientific Activities to Address Fundamental Questions About the Solar System, the Universe, and our Place in Them. Speaker = Chip Shearer

Supporting abstract:

Taylor G. J.

[Exploring the Moon in the 21st Century: Themes, Goals, Objectives, Investigations and Priorities 2008: Theme 1, Goals 1A and 1B: Fundamental Lunar Science Questions](#) [#2093]

2:10 p.m. Theme 2: Use the Moon to Prepare for Future Missions to Mars and Other Destinations. Speaker = Steve Mackwell

Supporting abstract:

Gruener J. E. Neal C. R.

[Exploring the Moon in the 21st Century: Themes, Goals, Investigations and Priorities, 2008: Theme 2, Use the Moon to Prepare for Future Missions to Mars and Other Destinations](#) [#2165]

2:30 p.m. Theme 3: Extend Sustained Human Presence to the Moon to Enable Eventual Settlement. Speaker = Mike Duke

Supporting abstract:

Taylor L. A. Taylor G. J. Neal C. R.

[Exploring the Moon in the 21st Century: Themes, Goals, Objectives, Investigations, and Priorities, 2008: Theme 3, Humans on the Moon](#) [#2057]

2:50 p.m. BREAKOUT GROUPS BEGIN

Breakout Session #1: Jim Spann and Chip Shearer, Discussion Leaders

Ballroom *Science of the Moon in the Broader Context of Solar System Science*

Breakout Session #2: Clive Neal and Steve Mackwell, Discussion Leaders

Patio Room *Science Associated with Future Mission to Mars and Beyond*

Breakout Session #3: Jerry Sanders and Mike Duke, Discussion Leaders

North Room *Extending Sustained Human Presence to the Moon*

5:00 p.m. [POSTER SESSION](#)

Wednesday, July 23, 2008

Session IV: FROM THE MOON

Ballroom

8:30 a.m. Hamill P. *
[*A Proof of Concept Experiment for Moon Based Earth Science Research*](#) [#2016]

8:50 a.m. Livio M. *
[*Astrophysics Enabled by the Return to the Moon*](#) [#2155]

9:10 a.m. Spann J. F. *
[*Heliophysics from the Moon*](#) [#2154]

9:30 a.m. BREAK

10:30 a.m. CONTRIBUTED SESSIONS:

Ballroom [*Water and Other Volatiles on the Moon*](#)

Patio Room [*Lunar Science Instruments*](#)

North Room [*Lunar Geology*](#)

CLOSING REMARKS

Ballroom

11:30 a.m. McKay C.
Closing Remarks and Thanks

11:30 a.m. LUNCH/POSTER VIEWING

1:30 p.m. Open Forum for Questions and Answers Regarding the Recently Issued NLSI Cooperative Agreement Notice

Other Special Activities and Group Meetings