

MEETINGS AND CONFERENCES

NATO Advanced Study Institute on Lunar Studies, Patras, Greece, September 14–25, 1971

Lectures were delivered as follows:

Motion and Gravity Field of the Moon

- A. E. Roy: Motion of the Moon in Space – our knowledge of it in the past and at present.
- M. D. Moutsoulas: Rotation of the Moon and Lunar Coordinate Systems.
- D. H. Eckhardt: Librations of the Lunar Globe.
- J. Rösch: Studies of the Moon's Motion by Laser.
- C. L. Goudas: Figure and Gravity Field of the Moon and the Mascon-Free Expression of the Lunar Potential.
- W. H. Michael: Recent Results on the Mass, Gravitational Field and Moments of Inertia of the Moon.

Dynamics of the Earth-Moon System

- R. A. Lyttleton: Dynamics of the Earth-Moon System.
- S. F. Singer: Tidal Evolution in the Earth-Moon System.
- S. F. Dermott: Stability of the Solar System: Evidence from the Asteroids.
- L. V. Morrison: The Secular Accelerations of the Moon's Orbital Motion and the Earth's Rotation.

Internal Structure and Chemical Composition of the Moon

- H. C. Urey: Chronology of the Lunar Surface.
- J. Zussman: Mineralogy and Petrology of Lunar Surface Rocks.
- S. O. Agrell: Some Comments about Lunar Soils and Microbreccias.
- A. Peckett: KREEP Minerals and Luny Rock-1.
- K. Fredriksson: Impact Rocks: Lunar, Meteoritic and Terrestrial.
- A. Turkevich: Some Comments Concerning the Chemical Nature of the Lunar Surface.
- A. San Miguel: Petrology of the Lunar Surface.
- T. Kirsten: Irradiation of the Lunar Surface.
- G. Latham: Seismology of the Moon.

Physical Properties of the Lunar Surface

- C. P. Sonett: Electric Properties of the Lunar Surface – Interaction of the Moon with the Solar Wind.

- F. Link: Photometry of the Lunar Surface.
 B. W. Hapke: Interpretation of Lunar Photometric Data.
 J. W. Salisbury: Spectroscopic Remote Sensing as a Tool of Lunar Exploration.
 A. A. Mills: Transient Lunar Phenomena.
 T. Hagfors: Radar Observations of the Moon.
 J. E. B. Ponsonby: Radar Images of the Moon at 75 and 185 cm.
 P. H. Moffatt: Aperture Synthesis Polarimetry of the Moon's Thermal Radiation.

Morphology of the Lunar Surface

- D. E. Gault: Cratering on the Lunar Surface.
 F. Hörzt: Geological Processes on the Lunar Surface.
 L. D. Jaffe: Studies of the Lunar Surface by Spacecraft.
 D. J. Roddy: Large-Scale Cratering Mechanics and Comet Impacts.
 D. P. Cruikshank
 and C. A. Wood: Hawaiian Lava Tubes and Possible Lunar Analogs.
 M. Gumtau: A New Technique of Colour Enhancement on Lunar Photography.
 C. A. Wood: A New Catalogue of Lunar Craters.
 Z. Kopal: Cosmic Influences on the Lunar Surface Relief.
 E. J. Öpik: Cumulative History of the Lunar Surface.

In addition to the above lectures, there were two Panel Discussions: on the Origin, Structure and Evolution of the Moon and on the Origin and Structure of Lunar Surface Relief and its Ground Structure.

Papers presented at the Institute will be published in later issues of this journal.

**The Lunar Science Institute Conference on Lunar Geophysics, Houston, Texas,
 October 18–21, 1971**

Seismology

- G. V. Latham: Moonquakes and Lunar Tectonism.
 M. N. Toksöz: Artificial Impacts and Internal Structure of the Moon.
 R. L. Kovach: Speculations on the Lunar Near Surface.
 N. Warren: Structure and Lunar Seismology.
 A. J. Gangi: The Lunar Seismogram.
 T. J. Ahrens: Impact Melting and Vaporization of Lunar Rocks and Minerals.

Magnetism

- C. P. Sonett: Thermal History of the Moon.
 P. Dyal: Lunar Properties from Transient and Steady Magnetic Field Measurements.
 P. J. Coleman: Magnetic Field Measurements with the Apollo 15 Subsatellite.

- A. C. Reisz: Investigation of the Validity of Current Models for Interpreting Lunar Electrical Conductivity from Interplanetary Magnetic Field Fluctuations.
- M. D. Fuller: Magnetic Properties of Lunar Breccias (10048).
- C. E. Helsley: Significance of Partial Thermal Remanence Observed in Lunar Rocks.
- T. Nagata: Strong Natural Remanent Magnetization of Some Apollo 14 Igneous Rocks.
- D. W. Collinson: Inferences from the Magnetic Properties of Apollo Samples.
- D. W. Strangway: Magnetism in Apollo Samples.
- R. A. Weeks: Paramagnetic and Ferromagnetic States of Lunar Soils and Crystalline Rocks.

Surface Properties

- R. W. Shorthill: Comparative Study of Earth-Based Radar and Infrared Measurements of the Lunar Apennine-Hadley Region.
- S. H. Zisk: First Results of the Measurement of Lunar Topography by Earth-Based Radar.
- W. Mendell: Differential Flux Scans of the Moon at $\lambda = 22 \mu$.
- J. R. Aronson: The Prospects for Remote Infrared Petrology.
- J. A. Bastin: Infrared Lunar Observations and Their Interpretation.
- C. H. Perry: Infrared and Raman Spectra of Lunar Samples from Apollo 11, 12 and 14.
- R. C. Birkebak: Spectral and Total Emittance of Apollo 12 Lunar Fines for a Density of 1400 kg/m^3 .
- R. G. Burns: Polarized Absorption Spectra of Lunar Pyroxene Single Crystals.
- A. J. Cohen: Cosmic-Ray Intensification of the Field Independent Fe^{3+} Transitions in Lunar and Meteoritic Titanagites and the Possible Relationship to the Ages of Interstellar Dust.
- B. Hapke: Progress in Understanding the Optical Spectra of Lunar Materials.
- T. B. McCord: Lunar Spectral Types.
- E. A. Whitaker: Lunar Color Boundaries and Their Relationship to Topographical Features.

Thermal Properties

- M. E. Langseth: The Apollo 15 Lunar Heat Flow Measurement.
- C. J. Cremers: Thermal Conductivity of Apollo 12 Fines at Intermediate Density.
- H. Horai: Thermal Property Measurements on Lunar Material Returned by Apollo Missions.

- D. W. Zimmermann: Thermoluminescence of Lunar Samples: Measurement of Temperature Gradients in Core Material.
 H. Mizutani: Accretional Process of the Moon.
 R. K. McConnell: Lunar Thermal History Revisited.
 M. N. Toksöz: Thermal Evolution of the Moon.

Electrical Properties

- G. L. Tyler: Bistatic Radar Observations of the Lunar Surface with Apollo 14 and 15.
 W. E. Brown: Coherent Radar Measurement Techniques.
 M. G. Simmons: Surface Electrical Properties Experiment.
 R. M. Housley: Electrical Properties of Synthetic Lunar Rocks.
 D. Chung: Laboratory Studies on Seismic and Electrical Properties of the Moon.
 F. C. Schwerer: D. C. Electrical Conductivity of Lunar Surface Rocks.
 D. C. Tozer: An Interpretation of the Lunar Electrical Conductivity Distribution.

Gravity and Figure of the Moon

- J. D. Mulholland: Measurement of Physical Librations Using Laser Retroreflectors.
 P. M. Muller: Implications of Lunar Gravimetry for Theories of Lunar History and Formation.
 W. L. Sjogren: Latest Results from Apollo 14 and 15 Gravity Analysis.
 S. K. Runcorn: The Shape of the Moon and Internal Dynamical Processes.
 M. Talwani: The Lunar Surface Gravimeter.
 J. C. Harrison: A Proposed Lunar Orbiting Gravity Gradiometer Experiment.
 J. Weber: The Lunar Surface Gravimeter Experiment for Apollo 17.

Lunar Models

- P. W. Gast: Chemistry of the Lunar Surface and the Internal Structure of the Moon.
 Z. Kopal: Moments of Inertia of the Lunar Globe and Chemical Structure of Its Outer Layers.
 S. F. Singer: Effects of Tidal Capture.
 H. C. Urey: Possible Gas Spheres as an Origin of the Moon and Some Meteoritic Objects.
 R. Hide: Comments on the Moon's Magnetism.

The proceedings of this conference will appear in a later issue of this journal.