LUNAR AND PLANETARY INSTITUTE
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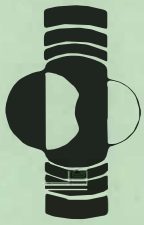

CALL FOR ABSTRACTS

MECA - LPI Workshop "Dust on Mars III"
September 21-23, 1988 Estes Park, Colorado

This announcement is being mailed to those who responded positively on the "Indication of Interest" form included in the first announcement mailed last September (~70 people). To date, at least 50 people have indicated plans to attend, so I think we can look forward to a successful workshop. Included in this announcement are two critical deadlines: one for submitting abstracts for the workshop and one for hotel accommodations. There will not be another notice mailed prior to these deadlines, so please mark your calendars!

The goal of the workshop is to stimulate cooperative research on, and discussion of, dust-related processes on Mars; this should provide valuable background information and help in preparation and scientific planning for the Mars Observer mission. The workshop will address the following general questions:

1) How is dust ejected from the martian surface into the atmosphere?
2) How does the global atmospheric circulation affect the redistribution of dust on Mars?
3) Are there sources and sinks of dust on Mars? If so, where are they and how do they vary with time?
4) How many components of dust are there on Mars, and what are their properties?

Each workshop participant is invited to submit an abstract (three or fewer pages in standard LPI format) of his or her proposed presentation. To preserve this as being an interactive workshop rather than a formal conference, the number of oral presentations will be limited. Depending on the number of abstracts received, this may require the program committee to assign some contributions to poster presentations.

ABSTRACTS
Abstracts for the MECA - Workshop Dust on Mars III are solicited. Forms and instructions are enclosed. Abstracts are to be a maximum of three (3) pages, including text, figures, tables, and references.

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MECA Workshop "Dust on Mars, III"

FIRST ANNOUNCEMENT

Dear Colleague:

I write to announce a MECA ("Mars: Evolution of its Climate and Atmosphere") workshop, "Dust on Mars, III", to be sponsored by NASA and the Lunar and Planetary Institute. Two previous "Dust on Mars" workshops have been held, and led to numerous productive discussions and cooperative research projects among the participants. There are still many untouched topics which could provide vital background information prior to the Mars Observer mission. To stimulate such research, the workshop will be organized to address the following general questions:

1) How many components of dust are there on Mars, and what are their properties?

2) How is dust ejected from the surface into the atmosphere?

3) How does the global atmospheric circulation affect the redistribution of dust?

4) Are there sources and sinks of dust? If so, where are they and how do they vary with time?

Each workshop participant will be invited to make an informal presentation and lead a discussion on his or her "dust-related" research. Short abstracts of each presentation will be required about six weeks prior to the workshop.

The timing of the workshop will depend upon the response of the prospective participants. Several possible dates are listed on the enclosed questionnaire. If held in early 1988, the workshop will be hosted by Arizona State University and held on campus in Tempe, AZ. For the dates later in the year, the University of Colorado will act as host, and the workshop will be held at the Stanley Hotel (an historic old resort hotel which inspired Stephen King's "The Shining") in Estes Park, CO (about 60 miles NW of Denver, near the entrance to Rocky Mountain National Park).

I would like to invite your participation in the workshop. Please return the enclosed Indication of Interest form by July 31, 1987, or contact the LPI Projects Office (telephone 713-486-2150). Future workshop mailings will be sent only to those who respond to this announcement. Please pass this information along to any of your colleagues who are not on the MECA mailing list. To preserve this meeting as an interactive workshop rather than a formal conference, we expect to limit attendance to 50 people.

Steven W. Lee
Workshop Organizer

LUNAR AND PLANETARY INSTITUTE
3303 NASA ROAD 1 HOUSTON, TEXAS 77058

September 18, 1987

SECOND ANNOUNCEMENT

MECA - LPI Workshop "Dust On Mars, III"
September 21-13, 1988

Dear Colleague:

The responses have been tallied from our initial announcement of the "Dust on Mars, III" workshop -- 45 people indicated plans to attend, and 53 were uncertain. The majority of responses expressed a preference to hold the workshop in September 1988, allowing us to proceed with preliminary arrangements.

The workshop will be held September 21-23, 1988, at the Stanley Hotel in Estes Park, Colorado. This should be the peak of autumn, so attendees may want to spend the weekend following the workshop touring nearby Rocky Mountain National Park and the surrounding areas.

The next workshop mailing will be sent out in early April 1988. There will be a call for abstracts, due July 15, 1988, included in the April announcement. To preserve this as being an interactive workshop rather than a formal conference, the number of oral presentations will be limited. Depending on the number of abstracts received, this may require the program committee to assign some abstracts to a poster session.

If you have any questions prior to the next mailing, please contact LeBecca Turner, LPI Projects Office (713-486-2158), or me (303-492-5348).

Steve Lee
Workshop Organizer

MECA - LPI Workshop "Dust on Mars III"
September 21-23, 1988 Estes Park, Colorado

FINAL ANNOUNCEMENT

The workshop will convene on Wednesday morning, September 21st at 8:30 a.m. A preliminary program as organized by the program committee is enclosed. Abstract volumes will be mailed to correspondence authors and to those who have pre-registered by September 1st. A few copies will be available at the meeting for those who pre-register after September 1st and for late registrants.

Talks will be arranged in 30 minute blocks, including discussion; there will also be ample time for general discussions at the end of each session. Speakers should complete the enclosed cue sheet and give it to one of the projectionists about 10 minutes prior to the session. Two 35mm and overhead projectors will be available for use in your presentation. If you will need any other equipment, please notify LeBecca Turner at 713-486-2158 as soon as possible.

Enclosed is a pre-registration form for the workshop; the registration fee is $40 for pre-registration and $50 for late registrations. The pre-registration deadline is September 12, 1988. We will hold registration at the Stanley beginning at 8 a.m. on Wednesday, just prior to the first session. Registration will not be held on Tuesday evening as previously announced.

Directions to the Stanley Hotel from the Denver airport are enclosed for your use. Information provided by the Stanley Hotel on a transporation service from the Denver airport to the Stanley is also enclosed. If you have any questions on the local arrangements, please contact Steve Lee (303-492-5348) or LeBecca Turner (713-486-2158).

American Airlines and LPI have an agreement for all 1988 conferences and workshop that provides discounted fares for meeting participants. The enclosed flyer includes discount information, the toll free telephone number for making reservations, and the group "star file" number to reference.

As you may know, Mars will be at opposition during the workshop. We expect to have one or more telescopes (on loan from the University of Colorado observatory) set up at the Stanley on Wednesday and Thursday night. Weather permitting, we should have an excellent view of the dust on Mars!

See you in September!

Steve Lee
Workshop Organizer

MECA - LPI Workshop "Dust on Mars III"
PRELIMINARY PROGRAM

Wednesday, September 21, 1988
8:30 a.m. Billiard Room, Stanley Hotel

DUST IN THE ATMOSPHERE: DUST STORMS, ATMOSPHERIC CIRCULATION MODELS, AND SEDIMENT TRANSPORT

Martian Great Dust Storms: Aperiodic Phenomena?
R.W. Zurek and R.M. Haberle

Simulations of the General Circulation of the Martian Atmosphere II. Dust Storms
J.B. Pollack, R.M. Haberle, J. Schaeffer, and H. Lee

Mars Global Atmospheric Oscillations: Annually Synchronized, Transient Normal Mode Oscillations and the Triggering of Global Dust Storms
J.E. Tillman

Numerical Simulations of Global Dust Storm Decay
J. Murphy, O.B. Toon, J.B. Pollack, and R.M. Haberle

Simulations of the Martian Boundary Layer: Factors Controlling the Behavior of the Surface Stress
R.M. Haberle, J.B. Pollack, and J. Schaeffer

**Use of Threshold Velocities in Dust Prediction*
D. Gillette

Baroclinic-radiative Instability and Martian Summer Polar Cyclones
J.R. Barnes

Earthbased Monitoring of the Martian Atmosphere Dust Opacity
T.Z. Martin

Correlations Between Surface Albedo Features and Global Duststorms on Mars
L.J. Martin and P.B. James

Comparison of Martian Aeolian Features and Results from the Global Circulation Model
R. Greeley, A. Skypeck, and J. B. Pollack

DISCUSSION

Thursday Morning, September 22, 1988

DUST ON THE SURFACE: SEDIMENT DEPOSITS AND SEDIMENT TRANSPORT

Dust in the Polar Regions of Mars: Is it the Same as at Low Latitudes?
P.C. Thomas

The North Polar Sand Seas: Preliminary Estimates of Sediment Volume
N. Lancaster and R. Greeley

**Martian Sediment Transport: Evidence from High Resolution Thermal Data*
P.R. Christensen

Viking Photometric and Albedo Studies of Regional Dust Transport on Mars
S.W. Lee and R.T. Clancy

Possible Intense Vortices and the Potential for Dust and Sand Transport on Mars
J.A. Grant and P.H. Schultz

DISCUSSION

Thursday Afternoon, September 22, 1988

PROPERTIES OF MARS DUST

**Martian Dust Properties: A Review*
R. Kahn

An Assessment of the Meteoric and Meteoritic Contributions to Dust on Mars
G.J. Flynn and D.S. McKay

The Mineral Components of Dust on Mars
A. Banin

Depolarized Radar Echos and Dust on Mars
T.W. Thompson and H.J. Moore

**Geographical Variability of Mars Surface Physical Properties*
B.M. Jakosky and J.A. Marshall

+Infrared Transmission Measurements of Martian Soil Analogs
T.L. Roush

DISCUSSION

Friday Morning, September 23, 1988

DUST OBSERVATIONS FROM FUTURE SPACECRAFT MISSIONS

**Mars Observer Pmirr: Distribution and Transport of Atmospheric Dust*
R.W. Zurek, R.D. Haskins, and D.J. McCleese

**The Mars Observer Thermal Emission Spectrometer: Studies of the Composition of Martian Dust*
P.R. Christensen

Mars Observer Vims and Phobos KRFM-ISM: Observations of Mars Dust
L.W. Esposito

GENERAL DISCUSSION: WHERE DO WE GO FROM HERE?

*** Abstracts not in abstract volume, but available at workshop.**
+ Presented by title only.