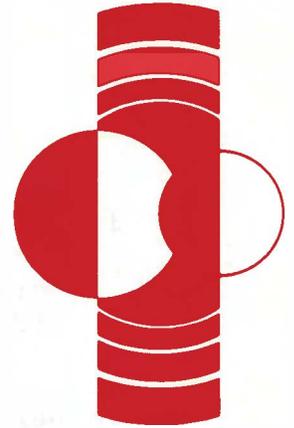


LUNAR AND PLANETARY INSTITUTE

LPI Topical Conference On
**MULTI-RING BASINS:
FORMATION AND EVOLUTION**
November 10-12, 1980



First Announcement

Dear Colleague:

Multi-ring basins -- models of origin, physical models, significance of occurrence, planetary distribution, terrestrial examples -- are active topics of investigation in many laboratories. These investigations which usually involve syntheses of diverse backgrounds, approaches and perspectives, would benefit greatly from an increased level of cross-talk among the investigators. It seems timely, therefore, to convene an LPI Topical Conference on Multi-ring Basins, which will gather interested parties from all disciplines to mull over the problems and to address the controversies in friendly surroundings. More specifically, we offer the following to justify yet another meeting added to our already-crowded schedules:

1. Multi-ring basins have now been identified on Mercury, Earth, the Moon, and Mars, and can reasonably be expected to exist on Venus; additionally, some unusual "variations on the theme" occur on Callisto, Ganymede, and probably Europa. Thus, the phenomenon of basin formation appears characteristic of the impact process, and the morphologic differences in basins among planets may indicate significant differences in crustal, gravitational, and/or atmospheric characteristics of the planets.
2. Numerous theories have been proposed to explain multi-ring basins. There currently exists no general agreement within the planetology community on such aspects of basins as their initial depths, diameters, ejecta volumes, ejecta distributions, or genesis of inner rings. All of these factors are significant in determining not only the geologic history of planetary bodies, but the geologic context of Apollo samples specifically.
3. Multi-ring structures on Earth are a critical base from which extrapolations can be made; extensive review of these features and of hypotheses for their origin is in order for all those who must extrapolate.

4. A gathering of the "multi-ring basin clan" for a focused, though unstructured, discussion of theory and evidence regarding basin development could serve to identify the significant and less significant divergences among models.

We hereby solicit your response in order to determine the extent of interest and potential participation. An LPI Topical Conference, organized along the lines of last year's highly successful "Highlands Conference," is our current plan.

The general format we have in mind is as follows. A two and one-half to three and one-half day symposium, depending upon response, seems appropriate. Abstracts will be solicited in time to have the volume distributed before the meeting. Half-day sessions will be arranged by topics, probably with keynote speakers, and no sessions will be concurrent. Coffee breaks will be rigidly scheduled and long enough to allow informal interchange. The thought is to provide a scheme whereby ample time and opportunity exist for informal discussion and exchange of ideas. We have snared a diverse and persuasive group of colleagues to help us on the program committee.

Now, if you have read this far, we hope your interest is sufficiently aroused to carry you on to the next page and prompt you to fill out the reply form. We look forward to your response by return mail.

Pete Schultz and Carroll Ann Hodges
Co-Convenors

Organizing Committee:

Richard F. Grieve, Dept. of Energy, Mines and Resources, Ontario
Carroll Ann Hodges, USGS, Menlo Park
Odette James, USGS, Reston
H. J. Melosh, SUNY at Stony Brook
Dennis Orphal, California Research and Technology, Livermore
Carle Pieters, Brown University, Providence
Peter H. Schultz, LPI, Houston
George Wetherill, Carnegie Institution, Washington, DC

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CONFERENCE OFFICE
(713) 486-2150

LPI Topical Conference On **MULTI-RING BASINS: FORMATION AND EVOLUTION**

November 10-12, 1980

Final Announcement

Dear Colleague:

The formation of the multi-ring basins had cataclysmic and long-lasting effects on the crusts of most solid-body planets. Consequently, an understanding of the processes involved in impact basin formation and evolution is fundamental to our understanding of early planetary crusts. In order to stimulate an exchange of ideas and hypotheses among scientists studying these problems in a variety of research fields, a two and one-half day "Conference on Multi-ring Basins: Formation and Evolution" will be held at the Lunar and Planetary Institute 10-12 November 1980.

Details concerning conference logistics are contained in this letter. Completion of the enclosed pre-registration form will help us with planning for the conference, as well as keep the registrations lines to a minimum on the first day of the conference. The fee for attending the meeting is \$35. Students active in degree-granting programs will be exempt from the fee. Please make checks payable to the Lunar and Planetary Institute.

A tentative program is enclosed. Each session will begin with an overview talk by an invited speaker, whose role will be to introduce the topic, to review past models, and to preview new contributions to be presented in the session. Contributed papers scheduled for oral presentation will have a maximum of ten minutes' speaking time. Participants are encouraged to bring one or two slides for use in the discussion periods following each talk. It is the aim of the program committee to provide a program format which has the flexibility to allow for the continuation of a "good, lively discussion," and yet provide time for the presentation of all scheduled papers. Following the last two sessions, "Point: Counterpoint" discussions will feature invited speakers who will summarize briefly their viewpoints on a specific topic. Discussion will then be opened for general comments. Brief supporting statements, rebuttals, or new ideas will be encouraged during this open forum. The use of one or two appropriate slides to support hypotheses will be allowed. The goal of this exercise is to stimulate an exchange of ideas; not to find the definitive answer to each problem. Extended coffee and lunch breaks during the conference will provide opportunities for one-on-one discussions, with a chance for everyone to get in his "last word" on a topic.

The conference abstract volumes will be mailed to first authors about a week before the meeting, and will be distributed to all participants during registration. Following the conference, abstracts may be obtained by sending \$2 to the LPI library for orders within the continental United States. Those ordering from elsewhere will be billed actual postage costs. Please specify the mail classification by which you would like your abstracts shipped (air mail, first class, surface, etc.).



Universities Space Research Association

Publication of the conference proceedings is in the early stages of planning. More complete information will be provided at the conference. During the meeting please assist us with this planning by completing a proceedings questionnaire indicating whether or not you intend to submit a manuscript.

AUDIO VISUAL AIDS: Projection of lantern slides, viewgraphs, 16mm movies, and dual screen presentation of 35mm slides will be available. Please prepare your slides as instructed on the enclosed form and turn them in to the projectionist at least ten minutes prior to the session in which you are scheduled to speak.

SOCIAL EVENTS: The Institute Director's Welcome Reception will commence immediately following the afternoon session on Monday evening, 10 November. All participants and their guests are invited to attend. Attempts are being made to provide live coverage of the Voyager encounter with Saturn on Tuesday, 11 November. During registration, we will be selling tickets for a catered lunch on the 11th at the LPI. The cost will be about \$5.50. Coverage of the encounter is scheduled to begin at 1:00 p.m. and to last until about 3:00 p.m. Sessions will be suspended during this time, and will resume at 3:30 p.m.

POSTER DISPLAYS: Display areas will be provided for posters, photographs, maps, and data that might assist in discussions during free time. If you wish to bring display material, please let me know approximately how much space you will require, and whether there are any special requirements.

SEATING: Eighty chairs will be available on a first come, first seated basis in the Berkner Room. Additional seating will be available in the Hess Room, where sessions will be monitored via closed-circuit TV.

MESSAGES: Messages will be taken by the LPI switchboard during sessions and posted in the main lobby. The TELEPHONE NUMBER is 713-486-2139. Those who have access to the FTS system may dial their FTS access code, followed by the direct number.

HOTEL RESERVATIONS: Each attendee is responsible for making his own arrangements for accommodations. A list of local hotels and their current rates is enclosed. Their relative locations are indicated on the small map. Reservations should be made as soon as possible, as the hotels stay booked most of the time.

REGISTRATION: Participants may register at the Lunar and Planetary Institute beginning Monday, 10 November, at 8:00 a.m.

Please feel free to contact me at the Institute (713-486-2150) for further information or assistance.

Sincerely,


Pamela Jones
Symposia Administrator
for the Program Committee

PJ

Enclosures