



Berendzen on Learning from Mars: an Opportunity



DR. BERENDZEN

Dr. Richard Berendzen, President of American University, astronomer, and educator well known to radio and television audiences, will address the September 10 colloquium of National Capital Astronomers and the Washington Academy of Sciences, of which NCA is the astronomical affiliate, in the Einstein Planetarium at the National Air and Space Museum.

Dr Berendzen will highlight the importance to humanity of what we can learn from the coming close approach of Mars to the Earth. He will relate potential gains in several areas of knowledge to be derived from study of the planet and discuss their contributions to the present welfare and future progress of humanity.

Of the enormous practical benefits we already enjoy from our space exploration, many are taken for granted, unknown, or unappreciated by a large sector

of the populace. We must raise public awareness that in many ways, by studying our cosmic environment we can learn more about the Earth -- and ourselves.

The United States Viking Mars Landers sought to answer the age-old question of life on Mars. Although no organisms were found, the interesting soil chemistry left the question not fully answered. The cosmos becons!

Dr. Richard Berendzen received his B.S. from the Massachusetts Institute of Technology and his M.A. and Ph.D. from Harvard University. He has taught at Harvard, Boston University, and the American University, where he has been President since 1980, lectures worldwide, and has six honorary degrees. He is a consultant to several prestigious organizations, including the National Academy of Sciences, and is a board member or chairman of several others. Dr. Berendzen is an astrophysicist and cosmologist, has authored more than 150 papers and four books, and has been a guest or host of nearly 1,000 radio and TV programs worldwide. He is well known for his advocacy of high academic standards and as one of the nation's top leaders in higher education.

SEPTEMBER CALENDAR -- *The public is welcome.*

- Friday, September 2, 9, 16, 23, 30, 7:30 pm -- Telescope-making classes at American University, McKinley Hall basement. Information: Jerry Schnall, 362-8872.
 - Tuesday, September 6, 13, 20, 27, 7:30 pm -- Telescope-making classes at Chevy Chase Community Center, Connecticut Avenue and McKinley Street, NW. Information: Jerry Schnall, 362-8872.
 - Saturday, September 10, 5:45 pm -- Dinner with the speaker at the Smithsonian Restaurant, 6th and C Streets, SW., inside the Holiday Inn. Reservations unnecessary. Use the 7th Street and Maryland Avenue exit of the L'Enfant Plaza Metrorail station.
 - Saturday, September 10, 7:30 pm -- NCA monthly colloquium in the Einstein Planetarium of the National Air and Space Museum, Seventh Street and Independence Avenue, SW. Enter Independence Avenue side. Dr. Berendzen will speak.
 - Friday, September 16, 23, 30, 8:30 pm -- NCA 14-inch telescope open nights with Bob Bolster, 6007 Ridgeview Drive, south of Alexandria off Franconia Road between Telegraph Road and Rose Hill Drive. Call Bob at 960-9126.
 - Saturday, September 17, 7:30 pm -- Discussion group on Mars opposition projects with Project Head Nancy Byrd. See page 3.
 - Saturday, September 24, 8:30 pm -- *Exploring the Sky*, free, public Mars Special with telescopes -- Bring the family. Presented jointly by NCA and the National Park Service, Glover Road south of Military Road, NW, near Rock Creek Nature Center. Planetarium if cloudy. Information: John Lohman, 820-4194.
- For other organizations' events of interest see elsewhere in this issue.

AIR AND SPACE MUSEUM OFFERS PROGRAMS

The following free, public programs will be held in the the National Air and Space Museum during September:

Saturday, September 4, 9:30 am -- Shiloh Unruh will present "Eye in the Sky: the Lick Observatory" in the Einstein Planetarium. Following the program, weather permitting, NCA Trustee and NASM Docent Stanley Cawelti will offer safe telescopic viewing of the Sun.

Saturday, September 24, 9:00 am to 1:00 pm -- Symposium on exploration of Mars in the Einstein Planetarium.

Suggestion: After learning about the exploration of Mars at the symposium, don't miss the opportunity to see the actual planet with fine telescopes the same evening at 7:30 with National Capital Astronomers and the National Park Service. See article below.

NCA/NCP "EXPLORING THE SKY" PARK PROGRAM TO FEATURE MARS FOR PUBLIC

On Saturday, September 24, at 7:30 pm, National Capital Astronomers and the National Park Service will present a free, public, telescopic viewing of Mars on Glover Road just south of Military Road, NW, in the large field near the Rock Creek Nature Center (about a mile east of Connecticut Avenue).

Bring the family! This will be an opportunity for all ages to see Mars at its closest approach for three decades, weather permitting, with a variety of telescopes. See the South Polar ice cap and some of the darker, greenish areas on the red planet, that for many years led early observers to believe that there was plant life on Mars. Possibly witness one of the occasional violent Martian dust storms, but in that case other interesting features may be obscured.

In addition to Mars, there will be an opportunity to see the beautiful rings of Saturn, craters on the Moon, and the faint, green planet Uranus. Although the Moon will be present, the planets will be bright enough to compete easily. In case of unsuitable weather, a program will be held in the Nature Center Planetarium.

Dr. John Lohman has also prepared interesting, descriptive, free handouts to help you learn and enjoy!

BALTIMORE ASTRONOMICAL SOCIETY ALSO OFFERS MARS PARTY

On the evening of September 24 (note conflict with above), the Baltimore Astronomical Society offers a Mars viewing party to which NCA members are welcomed. Their "Super Starwatch" will be held at the Howard County Fairground on Saturday, September 24, after 6:00 pm.

ASTRONOMY AND PERSONAL COMPUTERS by Joan B. Dunham

DOS Shells are programs that sit between the user and the operating system, helping the user to use the machine. A shell can display a menu of programs to choose from, instead of requiring the user to remember the program name and the operating system to activate it. Shells can also be set up to handle some of the system maintenance details, such as formatting diskettes, deleting files, parking the hard disk. Many users, especially those who use their systems infrequently, find shells very useful. Businesses often use shells to avoid having to teach employees all the details of the operating system. There are some negative points about shells to consider. They are memory-resident software and may conflict with other programs. Experienced users can find menu systems cumbersome and annoying. Also, there is some question about the wisdom of the user being isolated from the operating system. This may be fine for a business, where presumably there are personnel charged with the maintenance of the computer system, but independent users who must maintain their own systems, need to learn the operating systems, and would, therefore, have less need for shell programs. DOS shell programs are available as commercial products, as well as shareware and user-supported products. They are relatively inexpensive software, selling for \$30 to \$100, depending on the features.

Multi-Year Floppy Almanac -- The U.S. Naval Observatory is preparing a new version of the Floppy Almanac, one that will have data for more than one year. The software was discussed and demonstrated at meetings this summer. It is being tested and is not yet ready for general distribution, but is expected soon.

Weather Forecasting -- Software is available for personal-computer processing of Acu-Weather forecasting services. Acu-Weather is a commercial weather service that provides data to subscribers, local radio and TV stations. The software prepares maps with their weather data on the PC (although not the dazzling graphics we are accustomed to seeing on TV). The software itself is relatively inexpensive; the price for the weather service is not.

OCCULTATION EXPEDITIONS PLANNED

Dr. David Dunham is organizing observers for the following occultations. For further information call (301) 495-9062 (Silver Spring, MD).

Date	Time	Place	Vis Mag	Pent Sunlit	Cusp Angle	Min Aper
Grazing Lunar:						
09-22-88	03:46	Middletown, MD,	7.2	81	13S	15 cm
09-23-88	01:35	Whalebone Jct., NC	3.8	89	-18N	5* cm
09-23-88	05:16	Rodanthe, NC	3.0	90	14S	5 cm
10-01-88	07:51	Ft. Pierce, FL	1.8	64	8N	3 cm
Asteroidal:						
09-08-88	05:46	Southern Florida	9.6	3.0	(381) Myrrha	5 cm
09-30-88	01:02	Panama	6.1	6.0	(579) Sidonia	3 cm

*Bright-limb graze; minimum aperture uncertain.

DISCUSSION GROUP TO REVIEW PROGRESS, PLAN CONTINUED MARS WORK

The September 17 NCA discussion group will review current status of the Mars Opposition project and plan further work. Others interested in joining the project can receive information on the procedures, techniques, equipment, filters to be used, and coordination.

NCA discussion groups are multipurposed. They serve not only to unite those who are technically involved in the subject, but also as an opportunity for any interested person to learn at any level. Working groups on support areas often are initiated by these discussions.

Everyone is encouraged to attend and feel free to participate, whether to contribute technically or simply to learn and enjoy!

The group will meet at 7:30 pm at the University of DC, in Building 42, Room A06, just behind Building 44, which is on the north side of Van Ness Street, just west of Connecticut Avenue, NW, near the Metrorail Red Line Van Ness-UDC station.

Park under Building 44. (Tell the attendant you are attending a meeting.) Walk out the back of the garage a few feet to building 42. Take the elevator one floor up.

From Metrorail, as you emerge to the sidewalk, go to the left between the columns to the stairway on the left, up four short flights to the elevated walk to building 42. A06 is on the same floor.

If you have questions, call NCA: 320-3621.

UNIVERSITY OF MARYLAND OPEN HOUSE SCHEDULED

The Astronomy Program, University of Maryland, holds open house on the 5th and 20th of each month at the University's Observatory on Metzertt Road in College Park. Talks and slide shows are presented, followed by telescopic sky viewing, weather permitting.

September 5, 9:00 pm -- "Life in the Universe," Dr. Virginia Trimble.

Monday, September 20, 9:00 pm -- "The Restless Sun," Dr. Donat Weinshell.

The public is invited; there is no charge, and no reservations are necessary for individuals. Groups larger than ten should call (301) 454-3001 at least 5 days prior to the program.

PLEASE ENROLL ME IN NATIONAL CAPITAL ASTRONOMERS MEMBERSHIP

() Regular (\$32 per year) Each regular member receives Sky & Telescope and Star Dust.

() Junior (Only open to those under age 18.) Date of birth _____

Junior members pay a reduced rate and may elect not to receive Sky & Telescope.

() Sky & Telescope and Star Dust (\$25 per year)

() Star Dust only (\$10 per year)

() -

First name or initial Middle or initial Last Telephone _____

Street or box Apartment City State Zip _____

The following information is optional. If you would like to participate actively in NCA affairs, please indicate briefly any special interest, talent, skills, vocation, education, experience, or other qualifications which you might contribute. Thank you, and welcome!

NOTE: If you already subscribe to Sky & Telescope, please attach a recent mailing label, or indicate expiration date: _____. An adjustment will be made. Make check payable to National Capital Astronomers, Inc., and send with this form to: Patricia B. Trueblood, Secretary, 10912 Broad Green Terrace, Potomac, MD 20854.

EXCERPTS FROM THE IAU CIRCULARS

1. July 20 -- C.S. Shoemaker discovered an Amor-type asteroid of 16th magnitude on photos taken with the 46-cm Palomar Schmidt. R.N. Sinnott noted that the object is apparently the same as 1985DO₂. It has a period of 2.46 years and a perihelion distance of 1.23 AU.

2. August 6 -- D.E. Machholz discovered a comet (1988j) of 9th magnitude in Taurus with 27 X 120 binoculars. On August 8, five Japanese observers independently discovered the comet.

3. July-August -- D. Parker, J. Beish, I. Miyazaki, and S. O'Mera have independently discovered a new linear dark feature in the Memnonia region of Mars. Robert N. Bolster

U.S. NAVAL OBSERVATORY TOURS IN SEPTEMBER

The Monday night public tours of the Naval Observatory will begin at 8:30 pm (EDT) on September 12, 19, 26. No tour will be held on Labor Day, September 5. Passes will be issued to the first 100 persons in line at the main gate at 34th Street and Massachusetts Avenue, NW, beginning at the scheduled time.

Visitors will see various observatory facilities and, weather permitting, appropriately selected celestial objects, including the Moon, Saturn, and Uranus, with the historic 26-inch Clark refractor with which the satellites of Mars were discovered more than a century ago.

For details, call the taped Observatory message: (202) 653-1543.

FOR SALE

Panoramic mount for Tele Vue refractors, \$250.00. Also miscellaneous oculars and accessories. Dan Kaplan, 2711 Arcola Avenue, Wheaton, MD 20902, (301) 946-7585.

STAR DUST may be reproduced with credit to National Capital Astronomers.



Published eleven times yearly by NATIONAL CAPITAL ASTRONOMERS, INC., a non-profit, public-service corporation for advancement of astronomy and related sciences through lectures, expeditions, discussion groups, conferences, tours, classes, public programs, and

publications. NCA is an affiliate of the Washington Academy of Sciences. President, Walter I. Nissen. Star Dust deadline 15th of preceding month. Information: (301) 320-3621. Material for publication: Robert H. McCracken, Editor, 5120 Newport Avenue, Bethesda, MD 20816.

WARREN, WAYNE H.
8001 BRETT PL.
GREENBELT, MD 20770



FIRST CLASS

