

Martian Chronicles

Volume 24 Issue 10

October, 2005

**Deep Space
Mysteries 2005
Calendar on Sale.**

Price \$6.00

Membership Dues

Dues are \$15.00 for single membership and \$20.00 for family membership.

See Mildred Simpson, Treasure for both calendar and membership dues.

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Up Coming Club Events

October 2005

14th: M.A.R.S Club Meeting

Program: Craig MacDougal will present his latest

ALPO Presentation.

28th Mars observing on the dome.

Private viewing is limited to 300 people.

29th Mars viewing on the side walk.

Unlimited: we will need lots of telescopes and people to help with crowd control.

November 2005

3rd Library Talk 7:00

11th M.A.R. S. Club Meeting

Program ??

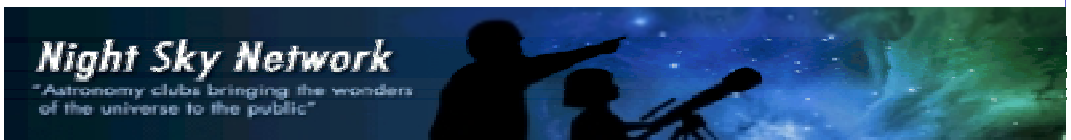
12th MOSI SkyWatch



The club needs members to serve as officers for the 2006 year.

Where is the owner of the Frog Scope?

Well, I am recovering from major surgery. That is why the newsletter is late in arriving at your door. Mildred Simpson will preside over the October business meeting and I know Craig has a great presentation planned for you. I will be at the November meeting and we will need to focus on the upcoming officers for 2006. I hope to see you out on the 28th and 29th helping with MOSI's Mars Watch and anything else we can find. Please let the MOSI Staff know if you can help.



2006 Science Library Talks *(tentatively scheduled)*

Title: Saturn, its Moons and Rings

Friday, January 7, 2006, 7:00 PM to 8:00 PM in the Saunders Planetarium at MOSI in Tampa

Description: With the opposition of Saturn on January 27, this is a perfect time to brush up on the Saturn system, including its largest moon Titan, and review the latest news from the NASA Cassini mission. This is the first of six presentations hosted this year by the Science Library at MOSI and the Museum Astronomical Resource Society.

Title: Eclipses, Occultations and Transits

Friday, March 4, 2006, 7:00 PM to 8:00 PM in the Saunders Planetarium at MOSI in Tampa

Description: There are always celestial bodies passing in front of each other, but there are several major examples this year, including the penumbral lunar eclipse of March 14, the total solar eclipse of March 29, the annular solar eclipse of September 22, and the Mercury transit of the Sun on November 8. What is their significance and what can we learn from them? Come find out. This is the second of six presentations hosted this year by the Science Library at MOSI and the Museum Astronomical Resource Society.

Title: Jupiter, its Moons and Rings

Friday, May 6, 2006, 7:00 PM to 8:00 PM in the Saunders Planetarium at MOSI in Tampa

Description: In honor of the opposition of Jupiter on May 4, we take this time to reacquaint ourselves with the largest planet in our solar system, its many and varied moons, and its system of fine and wispy rings. This is the third of six presentations hosted this year by the Science Library at MOSI and the Museum Astronomical Resource Society.

Title: Asteroids, NEAR-Shoemaker and Dawn

Friday, July 1, 2006, 7:00 PM to 8:00 PM in the Saunders Planetarium at MOSI in Tampa

Description: Many of these space rocks roam between the orbits of Mars and Jupiter, but certainly not all. Some pass closer to Earth than we would like. Come learn about these "starlike" objects (the meaning of "asteroid"). We will also learn from the past NEAR-Shoemaker mission to asteroid Eros, the Earth-based asteroid spotting that is going on today, and the Dawn mission, launched in June, to orbit the large asteroids Vesta and Ceres. This is the fourth of six presentations hosted this year by the Science Library at MOSI and the Museum Astronomical Resource Society.

Title: Constellations, their Lore and Meaning

Friday, September 2, 2006, 7:00 PM to 8:00 PM in the Saunders Planetarium at MOSI in Tampa

Description: Though harder to see above our modern cities, the stars and their groupings still grace our nighttime skies, ever ready to tell us a story, tell us the time and give us direction on a clear night. Come learn how the constellations got their names and how they can help us today. This is the fifth of six presentations hosted this year by the Science Library at MOSI and the Museum Astronomical Resource Society.

Title: The Planet Venus

Friday, November 4, 2006, 7:00 PM to 8:00 PM in the Saunders Planetarium at MOSI in Tampa

Description: With the MESSENGER spacecraft flyby of the planet Venus on October 24, this is a perfect time to brush up on the solar system body that is often called Earth's sister planet. Come see how Venus is so similar to our home, yet so different. This is the sixth of six presentations hosted this year by the Science Library at MOSI and the Museum Astronomical Resource Society.



Where No Spacecraft Has Gone Before

by Dr. Tony Phillips

In 1977, Voyager 1 left our planet. Its mission: to visit Jupiter and Saturn and to study their moons. The flybys were an enormous success. Voyager 1 discovered active volcanoes on Io, found evidence for submerged oceans on Europa, and photographed dark rings around Jupiter itself. Later, the spacecraft buzzed Saturn's moon Titan—alerting astronomers that it was a very strange place indeed! —and flew behind Saturn's rings, seeing what was hidden from Earth.

Beyond Saturn, Neptune and Uranus beckoned, but Voyager 1's planet-tour ended there. Saturn's gravity seized Voyager 1 and slingshot it into deep space. Voyager 1 was heading for the stars—just as NASA had planned.

Now, in 2005, the spacecraft is nine billion miles (96 astronomical units) from the Sun, and it has entered a strange region of space no ship has ever visited before.

“We call this region ‘the heliosheath.’ It’s where the solar wind piles up against the interstellar medium at the outer edge of our solar system,” says Ed Stone, project scientist for the Voyager mission at the Jet Propulsion Laboratory.

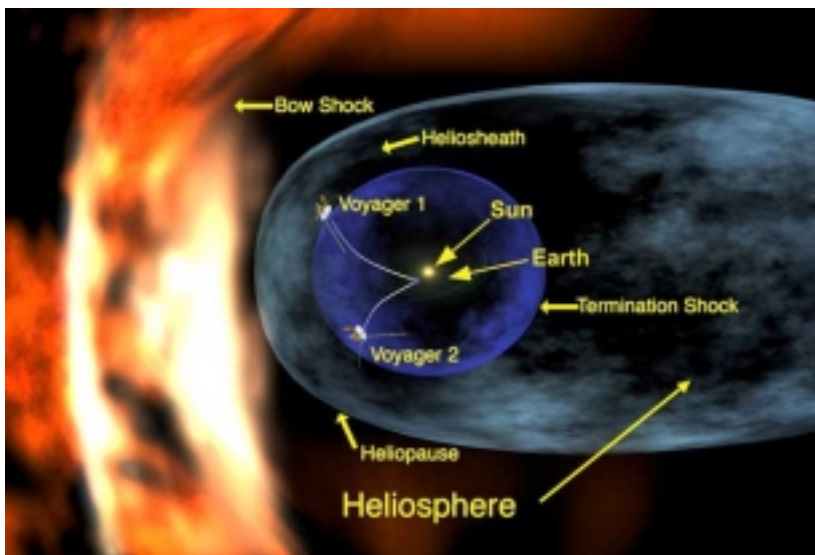
Out in the Milky Way, where Voyager 1 is trying to go, the “empty space” between stars is not really empty. It’s filled with clouds of gas and dust. The wind from the Sun blows a gigantic bubble in this cloudy “interstellar medium.” All nine planets from Mercury to Pluto fit comfortably inside. The heliosheath is, essentially, the bubble’s skin.

“The heliosheath is different from any other place we’ve been,” says Stone. Near the Sun, the solar wind moves at a million miles per hour. At the heliosheath, the solar wind slows eventually to a dead stop. The slowing wind becomes denser, more turbulent, and its magnetic field—a remnant of the sun’s own magnetism—grows stronger.

So far from Earth, this turbulent magnetic gas is curiously important to human life. “The heliosheath is a shield against galactic cosmic rays,” explains Stone. Subatomic particles blasted in our direction by distant supernovas and black holes are deflected by the heliosheath, protecting the inner solar system from much deadly radiation.

Voyager 1 is exploring this shield for the first time. “We’ll remain inside the heliosheath for 8 to 10 years,” predicts Stone, “then we’ll break through, finally reaching interstellar space.”

What’s out there? Stay tuned...



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Newsletter of the Museum Astronomical Resource Society

Martian Chronicles is published monthly by the Museum Astronomical Resource Society (also known as M.A.R.S. Astronomy Club), to provide club news and other items of interest to its member. MARS is sponsored by MOSI Tampa Florida. Annual club membership dues are \$15.00 single and \$20.00 for families. Dues can be paid to any club officer at a meeting or event or mailed to the Club Membership/Renewal Address listed below. Newsletters are available to nonmembers by requesting a complimentary issue. Please send all inquiries, comments and newsletter contributions to the address below. The deadline for submitted contributions is the 25th of the month prior to the next issue. Contribution may be delayed in publication due to available space.

*Membership/Renewal
Make checks payable to: Mildred Simpson, (Club Treasurer)
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2005 M.A.R.S. Club Officers

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Jimmy Thomas, 813-888-7187

Astronomy Day Coordinator— Your name could be here

Librarian—Douglas Ordetx

MOSI Contact—813-987-633,

*Membership
Club dues run from September to
August of each year. Dues will be
taken at the September Meeting.
\$15 single \$20 family*

October 2005

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3 <i>New Moon</i>	4	5	6	7	8
9	10 <i>First Quarter</i>	11	12	13	14 <i>MARS Club Meeting</i>	15
16	17 <i>Full Moon</i>	18	19	20	21	22
23	24	25 <i>Last Quarter</i>	26	27	28 <i>Mars observing on the dome</i>	29 <i>Mars observing on the sidewalk</i>
30 <i>Time Changes 2:00 am</i>	31					