The Monthly Newsletter of the Magic Valley Astronomical Society

February Highlights

Feb. 1st, 6:45 to 9:00 PM **Family night telescope viewing.** Centennial Obs. Admission: $1.50, free for children 6 and under. Free with paid planetarium admission.

Feb 12th, 7:00 pm to midnight **Monthly Membership General Meeting** and **Monthly free star party.**

Feb 15th, 7:00 to 9:00 PM **Family night telescope viewing.** Centennial Obs. Admission: $1.50, free for children 6 and under. Free with paid planetarium admission.

Special Announcement

Great Basin National Park Annual Messier Marathon at Lehman Caves Visitors Center Baker, NV. See page 9.

Notes from the President

Our first general membership meeting for the New Year will be held at 7:00 P.M. on Saturday the 12th of February, 2011. We will be meeting at the Herrett Center, on the College of Southern Idaho Campus.

Tom Gilbertson will host our annual telescope workshop "I Have a New Telescope, Now What?" If you are new to the hobby or if you have new equipment that you would like assistance in learning how to operate, please bring it along (as well as any instruction manuals) and our members will be happy to provide you with whatever assistance is required. This event is open to the general public and we encourage non-members to join us for this evening.

Members in attendance will pair off with new (or old) telescope owners during the breakout sessions and teach them how to operate their new telescope (or old). We could use a lot of help from our members, so that no one has to wait to be helped. We had a good turn out last year and we expect more this year as well. Following the meeting we will take everyone with their telescopes up to the Stargazer's Deck at the Centennial Observatory for a evening of observing.

We also have new membership packets and will make them available for those who join the club on the same night. For those who are interested and haven't decided yet to join, we have new brochures now available for non-members as well.

We have overcome some problems of the past and hopefully we will continue to grow in a positive direction. The MVAS board is already working on an exciting year of activities and events, including the Messier Marathon in March, two separate public summertime star parties in July (Castle Rocks / City of Rocks), and August (Pomerelle Mt.) plus many other activities through out the year.

Clear skies until next month,

Terry Wofford, President

MVAS Memberships

Welcome to the Magic Valley Astronomical Society

Welcome to the society and hello. We hope you have a good time, enjoy the hobby, & bring good skies with you.

We hold indoor meetings each month at the Herrett Center for Arts & Science College of Southern Idaho campus in Twin Falls, ID, USA . Our meetings start at 7:00 pm on the second Saturday of the month. There will always be a very interesting program, class or presentation at these meetings, as well as good fellowship. There is always something new to learn.

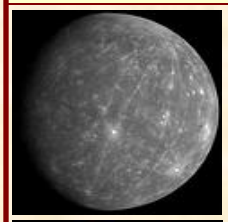
Following our meetings we have a star party (weather permitting) at the Centennial Observatory, also at the Herrett Center.

Our star parties are free and you don't have to bring your own telescope. Telescopes are also set up outside on the stargazer's deck. Star Parties are held year round, so please dress accordingly as the Observatory is not heated, nor air conditioned.

Wishing you dark skies and clear nights!

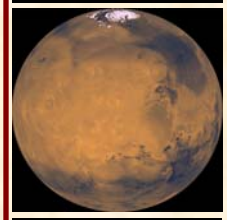
MVAS Board

February Celestial Sky Events



Mercury may be visible early in the month, very low in the morning twilight. It fades quickly after that and goes behind the Sun on the 25th.

Venus will be hard to miss this month. It will be the brightest object in the south-east predawn sky. It will rise around 2 hours before the Sun. Consequently early morning observers will see Venus when the sky is dark.



Mars will go behind the Sun early in the month and will be impossible to see.

Jupiter will be big and bright in the sky as it gets dark early in the month. It is starting to sink lower in the dusk sky. The best time to observe it will be early in the month and early in the evening just as it gets dark, or sooner.

Saturn will be very high in the south in Virgo in the morning predawn sky. The best time to observe it will be when it has risen highest in the sky which will be a few hours after midnight. Saturn's famous rings will not appear edge on.

Uranus will be around 4º west of Jupiter early in the month and 8 1/2º by the end of the month. Early in the month Uranus will still be a good target but like Jupiter it is starting to sink into western sky.

Neptune will go behind the Sun at mid-month so it will be invisible all month.

3 New Moon
6 Moon at apogee (farthest from Earth)
11 Moon First Quarter .
13 Moon Greatest N. Declination + 24.2°
18 Full Moon (Snow Moon - Algonquian Nation)
19 Moon at perigee (closest to Earth)
24 Moon Last Quarter
25 Moon Greatest S. Declination – 24.2°

Other Observing Highlights

4 Mars at conjunction with the Sun The red planet passes into the morning sky.

7 Moon near Jupiter

8 Alpha Centaurids meteor shower peaks at 11h UT. Favorable year for a sometimes can be a major southern shower. About 6 meteors/hour but can peak at up to 25/hour. Produces bright, fast meteors. Active Jan 28 to Feb 21. Best observed in the pre-dawn hours.

11 First Quarter Moon at 7:18 UT.
Moon near the Pleiades at 23h UT.

12 Moon near Aldebaran (evening sky)

16 Moon near Beehive cluster M44 at 22h UT.

18 Moon near Regulus (midnight sky) at 8h UT.

21 Moon near Saturn (morning sky) at 12h UT.

22 Moon near Spica (morning sky) at 0h UT.

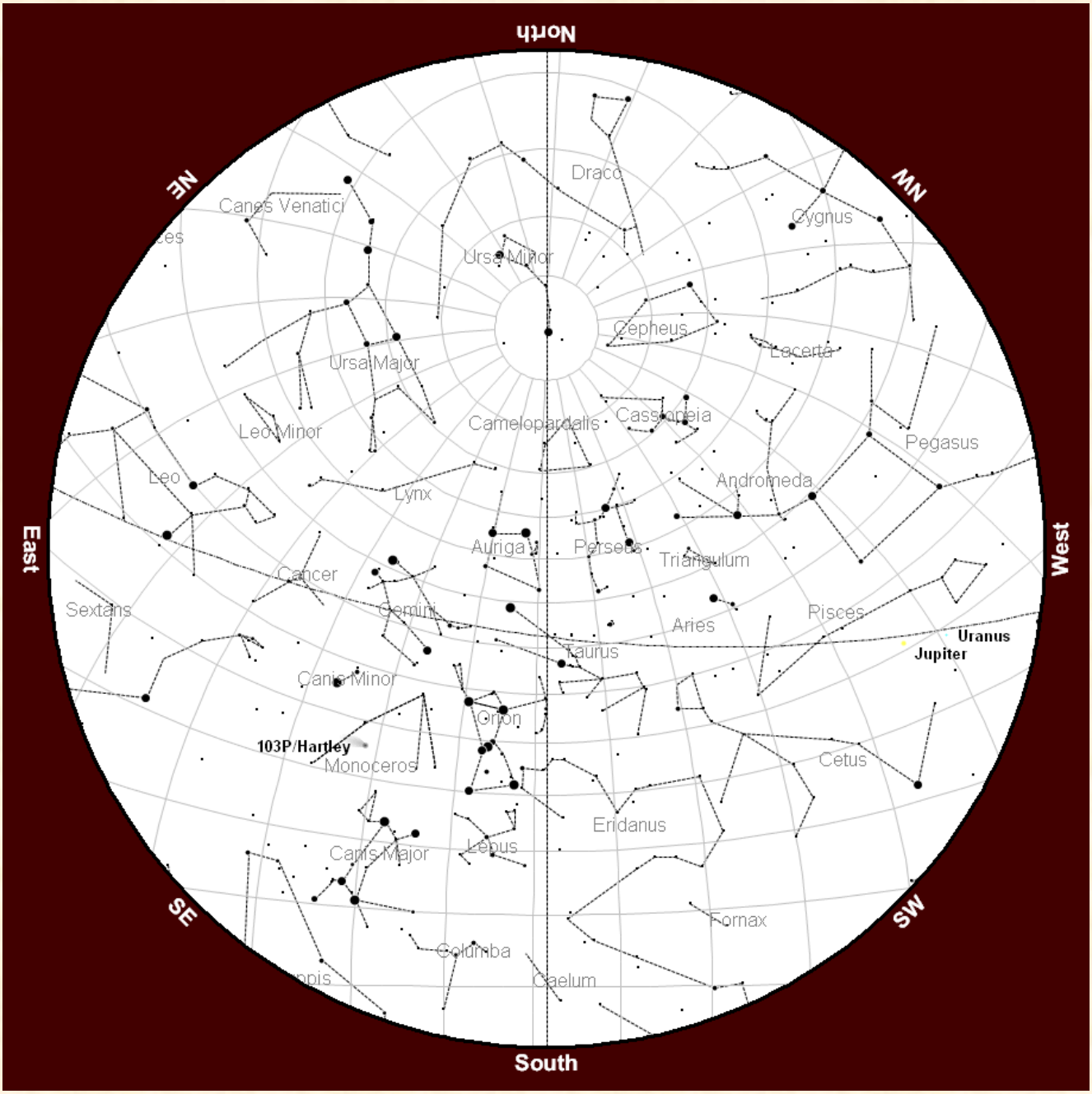
24 Last Quarter Moon at 23:26 UT.

25 Moon near Antares (morning sky) at 5h UT.
Mercury at superior conjunction with the Sun at 9h UT. The planet passes into the eve ning sky.

Zodiacal Light is caused by sunlight reflected off meteoric dust in the plane of the solar system. Choose a clear, moonless night, about 1-2 hours after sunset, and look for a large triangular-shaped glow extending up from the horizon (along the ecliptic). The best months to view the Zodiacal Light is when the ecliptic is almost vertical at the horizon: February through April (evenings) and October-November (morning); times reversed for the southern hemisphere.

Image: Zodiacal Light on the Pacific Ocean Laguna Verde near Valparaiso, Chile Credit: NASA APOD Manel Soria

Planisphere for February



Did You Know?

Installed on the ISS in April 2001, Canadarm2 is a 17-metre long robotic arm essential to the Station's construction and operations. Canadarm2 assembled most of the modules and major components of the ISS while in space. It is routinely used to move supplies, equipment and even astronauts. With the orbiting outpost nearing completion, the role of the Canadian-built robotic arm will change significantly: it will shift gears from building the ISS to supporting its maintenance and upkeep. This includes helping to catch capture free-flying spacecraft and dock them on the ISS, to carrying everything from science payloads to necessities for the 6-person crew living aboard the ISS. Space Shuttle mission STS-133, launching Feb. 24th at 16:50 EST will mark Canadarm2's 28th mission. By the time STS-133 is over, Canadarm2 will have assisted 97 spacewalks and unloaded 43 payloads ferried by the Space Shuttle. Image: Astronaut Stephen K. Robinson anchored to the end of Canadarm2 during STS-114, credit NASA

Looking through the Eyepiece - Gemini, the Twins

Gemini is one of the constellations of the zodiac. Its name is Latin for "twins", and it is associated with the twins Castor and Pollux in Greek mythology. Gemini lies between Taurus to the west and Cancer to the east, with Auriga and Lynx to the north and Monoceros and Canis Minor to the south.

In October and November Gemini will appear along the eastern horizon in the morning sky prior to sunrise. The best time to observe Gemini at night is overhead during the months of January and February. By April and May, the constellation will be visible soon after sunset in the west. The easiest way to locate the constellation is to find its two brightest stars Castor and Pollux eastward from the familiar “V” shaped asterism of Taurus and the three stars of Orion’s (see January’s newsletter) belt. Another way is to mentally draw a line from the Pleiades star cluster located in Taurus and the brightest star in Leo, Regulus. In doing so, you are drawing an imaginary line that is relatively close to the ecliptic, a line which intersects Gemini roughly at the midpoint of the constellation, just below Castor and Pollux. Although Castor has the Bayer designation Alpha, it is actually the second brightest in the constellation after Pollux. Castor is a sextuple star system; Castor was discovered to be a visual binary in 1678, with the magnitude of its components being 2.8 and 2.0. The separation of the components is about 6" and the period of revolution is around 467 years Castor is itself a spectroscopic binary

Observational Data for Castor

Right ascension 07h 34m 36s
Declination +31° 53' 18"
Apparent magnitude (V) 1.96 / 2.91

Pollux (β Gem, β Geminorum, Beta Geminorum) is an orange giant star approximately 34 light-years from the Earth in the constellation of Gemini (the Twins). Pollux is the brightest star in the constellation, brighter than Castor (Alpha Geminorum). In 2006, Pollux was confirmed to have an extrasolar planet orbiting it. Although Johannes Bayer (1572-1625) gave the first-rank Greek letter designation of Alpha to Castor around 1600, Pollux is actually the brightest star (7:45:19.0+28:1:34.3, ICRS 2000.0) of Constellation Gemini, the Twins. Hence, it has been suggested that one of these stars may have changed in luminosity during the past four centuries. As a highly evolved and relatively cool orange-red giant, single star, Pollux is not much like its "twin" star Castor, which is actually composed of three sets of binary stars (as many as four bluish-white, main sequence stars with two fainter companions).

Observational Data for Castor

Right ascension $07^h\ 45^m\ 19.4^s$
Declination +28° 01′ 35″
Apparent magnitude (V) 1.15

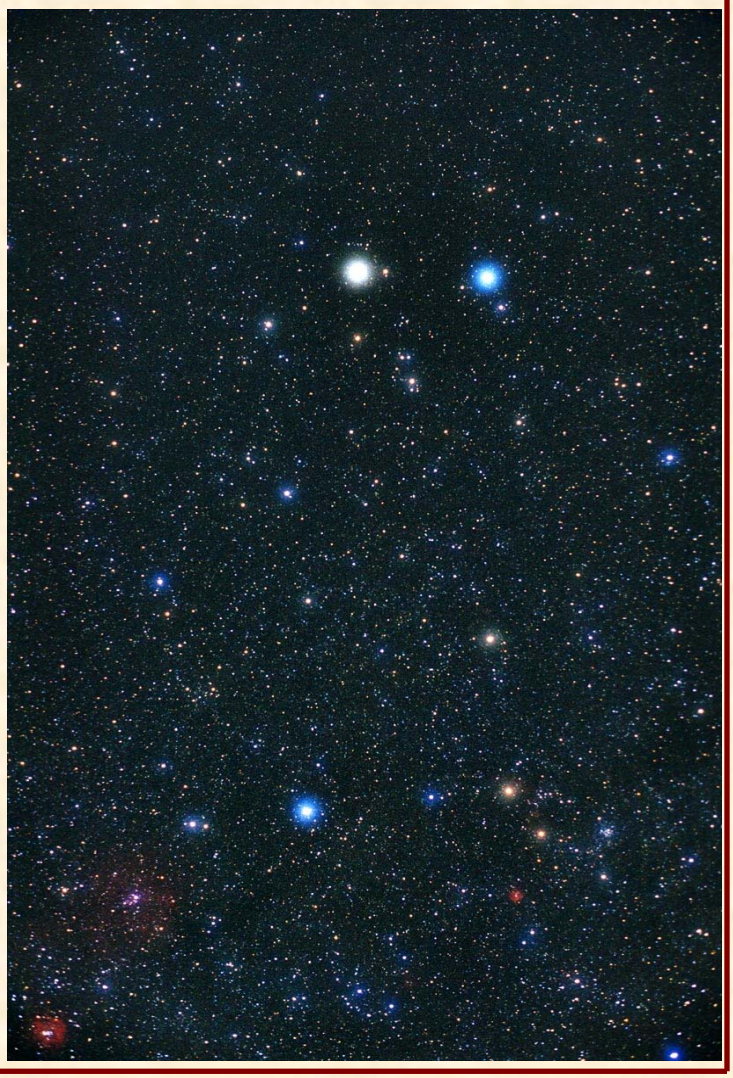
Zeta Geminorum (ζ Gem, ζ Geminorum) is a star in the constellation Gemini. It has the traditional name Mekbuda. The name Mekbuda has roots in ancient Arabic where it and the star Mebsuta (Epsilon Geminorum) were the paws of a lion. Mekbuda comes from a phrase meaning *the lion's folded paw*.

It is located on the outstretched left "leg" of the twin Pollux. It is a Cepheid variable star and as such has a variable apparent magnitude of +3.7 to +4.2, with period of approximately 10.2 days. The star is approximately 1200 light years from Earth. Mekbuda is a supergiant making it approximately is 220,000 times the size of the Sun.

Observational Data for Mekbuda

Right ascension $07^h\ 04^m\ 06.5^s$
Declination +20° 34′ 13.1″
Apparent magnitude (V) 3.7 to 4.2

Image of Gemini - Credit: © biochem.szote.u-szeged.hu creative commons license applied.



Looking through the Eyepiece - Gemini, the Twins

Given that Gemini is pointing away from the Milky Way, there are comparatively few deep sky objects of note — the Eskimo Nebula and Medusa Nebula, Messier object M35 and Geminga being the ones that attract the most attention. The Eskimo and Medusa nebulae are both planetary nebulae, the one approximately 2,870 light years away and the other 1,500 light years distant. M35 is an open star cluster which was discovered in the year 1745 by Swiss astronomer Philippe Loys de Chéseaux. And Geminga is a neutron star approximately 550 light years from Earth.

Eskimo Nebula (NGC 2392), also known as the Clownface Nebula or Caldwell 39, is a bipolar double-shell planetary nebula, it was discovered by astronomer William Herschel in 1787. The formation resembles a person's head surrounded by a parka hood. It is surrounded by gas that composed the outer layers of a Sun-like star. The visible inner filaments are ejected by strong wind of particles from the central star. The outer disk contains unusual light-year long orange filaments. NGC 2392 lies more than 2,870 light-years away and is visible with a small telescope in the constellation of Gemini.

The nebula was discovered by William Herschel on January 17, 1787, in Slough, England. He described it as "A star 9th magnitude with a pretty bright middle, nebulosity equally dispersed all around. A very remarkable phenomenon." NGC 2392 WH IV-45 is included in the Astronomical League's Herschel 400 observing program.

Observational Data for the Eskimo Nebula

Right ascension $07^h\ 29^m\ 10.7669^s$
Declination +20° 54′ 42.488″

Image: Eskimo Nebula Amateur Image Credit: Celestron Images catalog Creative Commons License Applied. John Buonomo, Astrophotographer

Medusa Nebula is a large planetary nebula in the constellation of Gemini on the Canis Minor border. It also known as Abell 21 and Sharpless 274. It was originally discovered in 1955 by UCLA astronomer George O. Abell, who classified it as an old planetary nebula. The braided serpentine filaments of glowing gas suggests the serpent hair of Medusa found in ancient Greek mythology.

Until the early 1970s, the Medusa was thought to be a supernova remnant. With the computation of expansion velocities and the thermal character of the radio emission, Soviet astronomers in 1971 concluded that it was most likely a planetary nebula.

As the nebula is so big, its surface brightness is very low, with surface magnitudes of between +15.99 and +25 reported. Because of this most websites recommend at least an 8-inch (200 mm) telescope with an [O III] filter to find this object although probably possible to image with smaller apertures.

Observational Data for the Medusa Nebula

Right ascension $07^h\ 29^m\ 02.69^s$
Declination +13° 14′ 48.4″
Distance 1,500 ly (460 pc)
Apparent magnitude (V) 15.99

Image: Medusa Nebula Credit: 1 June 2010 Jschulman555 Creative Commons Attribution 3.0 Unported license.

Looking through the Eyepiece - Gemini, the Twins

Messier 35 (also known as **M 35**, or **NGC 2168**) is an open cluster in the constellation Gemini. It was discovered by Philippe Loys de Chéseaux in 1745 and independently discovered by John Bevis before 1750. The cluster is scattered over an area of the sky almost the size of the full moon and is located 850 parsecs (2,800 light-years) from Earth.

The mass of M35 has been computed using a statistical technique based on proper motion velocities of its stars. The mass within the central 3.75 parsecs was found to be between 1600 and 3200 solar masses (95 percent confidence), consistent with the mass of a realistic stellar population within the same radius.

Observational Data for M35

Right ascension 06^h 09.1^m
Declination +24° 21′
Distance 850 pc (2800 ly)
Apparent magnitude (V) 5.30

Image of M35 Credit: 2MASS / NASA

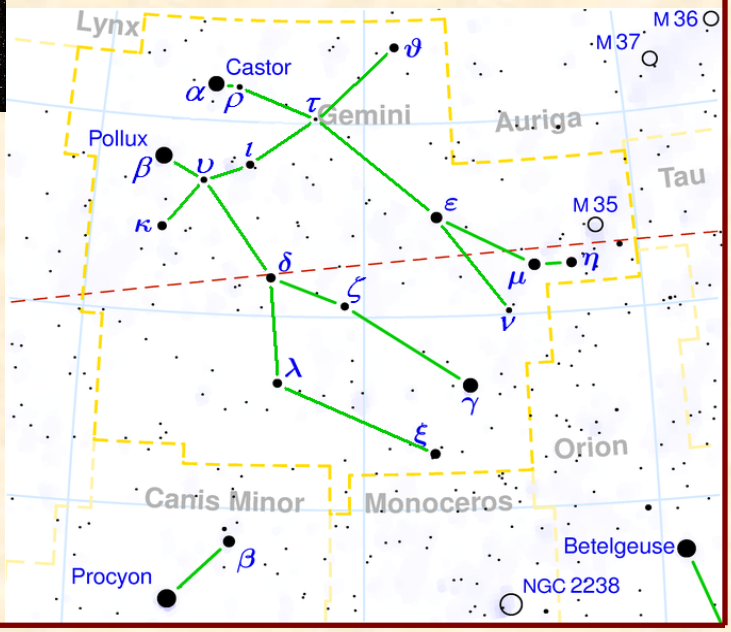
H.A. Rey has suggested an alternative to the traditional visualization that connected the stars of Gemini to show a pair of twins holding hands. Pollux's torso is represented by star υ Geminorum, Pollux's right hand by ι Geminorum, Pollux's left hand by κ Geminorum: all three of these stars are of the fourth magnitude. Pollux's pelvis is represented by star δ Geminorum, Pollux's right knee by ζ Geminorum, Pollux's right foot by γ Geminorum, Pollux's left knee by λ Geminorum, and Pollux's left foot by ξ Geminorum. Gamma Geminorum is of the second magnitude, while Delta and Xi Geminorum are of the third magnitude. Castor's torso is represented by the star τ Geminorum, Castor's left hand by ι Geminorum (which he shares with Pollux), Castor's right hand by θ Geminorum: all three of these stars are of the fourth magnitude. Castor's pelvis is represented by the star ε Geminorum, Castor's left foot by ν Geminorum, and Castor's right foot by μ Geminorum and η Geminorum: ε, μ, and η Geminorum are of the third magnitude.

Geminga is a neutron star approximately 250 parsecs away from the Sun in the constellation Gemini. The nature of Geminga was quite unknown for 20 years after its discovery by NASA's Second Small Astronomy Satellite (SAS-2). Finally, in March 1991 the ROSAT satellite detected a periodicity of 0.237 seconds in soft x-ray emission. Thus, it is supposed that Geminga is a sort of neutron star: the decaying core of a massive star that exploded as a supernova about 300,000 years ago. This nearby explosion may be responsible for the low density of the interstellar medium in the immediate vicinity of the Solar System. This low-density area is known as the Local Bubble. Possible evidence for this includes findings by the Arecibo Observatory that local micrometre-sized interstellar meteor particles appear to originate from its direction.

Observational Data for Geminga

Right ascension 06^h 33^m 54.15^s
Declination +17° 46′ 12.9″
Apparent magnitude (V) ?
Distance 815 ly (250 pc) Note: no usable photo of Geminga was found.

Gemini was associated with the myth of Castor and Pollux, collectively known as the Dioscuri. One myth of these twins concerns cattle theft, and may be connected to earlier myths that described the Milky Way as a herd of dairy cows On star maps, the twins are usually viewed as leaning away from the Milky Way, but are sometimes depicted with one of the twins residing in the Milky Way, and the other outside it, a situation making it appear that one of the twins is stealing the cattle, and the other is observing.



NASA's NEOWISE Completes Scan for Asteroids & Comets

PASADENA, Calif. -- NASA's NEOWISE mission has completed its survey of small bodies, asteroids and comets, in our solar system. The mission's discoveries of previously unknown objects include 20 comets, more than 33,000 asteroids in the main belt between Mars and Jupiter, and 134 near-Earth objects (NEOs). The NEOs are asteroids and comets with orbits that come within 45 million kilometers (28 million miles) of Earth's path around the sun.

NEOWISE is an enhancement of the Wide-field Infrared Survey Explorer, or WISE, mission that launched in December 2009. WISE scanned the entire celestial sky in infrared light about 1.5 times. It captured more than 2.7 million images of objects in space, ranging from faraway galaxies to asteroids and comets close to Earth. In early October 2010, after completing its prime science mission, the spacecraft ran out of the frozen coolant that keeps its instrumentation cold. However, two of its four infrared cameras remained operational. These two channels were still useful for asteroid hunting, so NASA extended the NEOWISE portion of the WISE mission by four months, with the primary purpose of hunting for more asteroids and comets, and to finish one complete scan of the main asteroid belt.

"Even just one year of observations from the NEOWISE project has significantly increased our catalog of data on NEOs and the other small bodies of the solar systems," said Lindley Johnson, NASA's program executive for the NEO Observation Program.

Now that NEOWISE has successfully completed a full sweep of the main asteroid belt, the WISE spacecraft will go into hibernation mode and remain in polar orbit around Earth, where it could be called back into service in the future. In addition to discovering new asteroids and comets, NEOWISE also confirmed the presence of objects in the main belt that had already been detected. In just one year, it observed about 153,000 rocky bodies out of approximately 500,000 known objects. Those include the 33,000 that NEOWISE discovered.

NEOWISE also observed known objects closer and farther to us than the main belt, including roughly 2,000 asteroids that orbit along with Jupiter, hundreds of NEOs and more than 100 comets. These observations will be key to determining the objects' sizes and compositions. Visible-light data alone reveal how much sunlight reflects off an asteroid, whereas infrared data is much more directly related to the object's size. By combining visible and infrared measurements, astronomers also can learn about the compositions of the rocky bodies -- for example, whether they are solid or crumbly. The findings will lead to a much-improved picture of the various asteroid populations.

NEOWISE took longer to survey the whole asteroid belt than WISE took to scan the entire sky because most of the asteroids are moving in the same direction around the sun as the spacecraft moves while it orbits Earth. The spacecraft field of view had to catch up to, and lap, the movement of the asteroids in order to see them all.

"You can think of Earth and the asteroids as racehorses moving along in a track," said Amy Mainzer, the principal investigator of NEOWISE at NASA's Jet Propulsion Laboratory in Pasadena, Calif. "We're moving along together around the sun, but the main belt asteroids are like horses on the outer part of the track. They take longer to orbit than us, so we eventually lap them."

NEOWISE data on the asteroid and comet orbits are catalogued at the NASA-funded International Astronomical Union's Minor Planet Center, a clearinghouse for information about all solar system bodies at the Smithsonian Astrophysical Observatory in Cambridge, Mass. The science team is analyzing the infrared observations now and will publish new findings in the coming months. When combined with WISE observations, NEOWISE data will aid in the discovery of the closest dim stars, called brown dwarfs. These observations have the potential to reveal a brown dwarf even closer to us than our closest known star, Proxima Centauri, if such an object does exist. Likewise, if there is a hidden gas-giant planet in the outer reaches of our solar system, data from WISE and NEOWISE could detect it. The first batch of observations from the WISE mission will be available to the public and astronomical community in April.

"WISE has unearthed a mother lode of amazing sources, and we're having a great time figuring out their nature," said Edward (Ned) Wright, the principal investigator of WISE at UCLA.

JPL manages WISE for NASA's Science Mission Directorate at the agency's headquarters in Washington. The mission was competitively selected under NASA's Explorers Program, which NASA's Goddard Space Flight Center in Greenbelt, Md., manages. The Space Dynamics Laboratory in Logan, Utah, built the science instrument, and Ball Aerospace & Technologies Corp. of Boulder, Colo., built the spacecraft. Science operations and data processing take place at the Infrared Processing and Analysis Center at the California Institute of Technology in Pasadena. JPL manages NEOWISE for NASA's Planetary Sciences Division. The mission's data processing also takes place at the Infrared Processing and Analysis Center.

NASA News
JET PROPULSION LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY

Planets in Strange Places

Red star, blue star, big star, small star—planets may form around virtually any type or size of star throughout the universe, not just around mid-sized middle-aged yellow stars like the Sun. That's the surprising implication of two discoveries in 2006 from the 0.85-meter-diameter Spitzer Space Telescope, which is exploring the universe from orbit at infrared (heat) wavelengths blocked by the Earth's atmosphere.

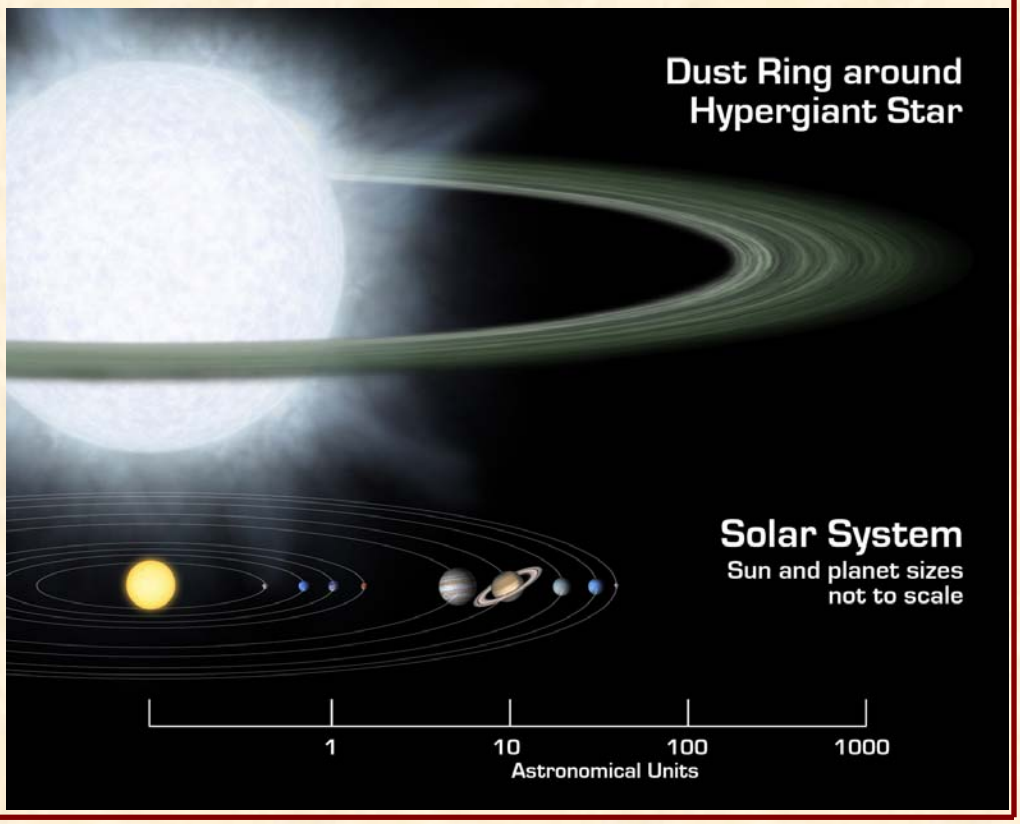
At one extreme are two blazing, blue "hypergiant" stars 180,000 light-years away in the Large Magellanic Cloud, one of the two companion galaxies to our Milky Way. The stars, called R 66 and R 126, are respectively 30 and 70 times the mass of the Sun, "about as massive as stars can get," said Joel Kastner, professor of imaging science at the Rochester Institute of Technology in New York. R 126 is so luminous that if it were placed 10 parsecs (32.6 light-years) away—a distance at which the Sun would be one of the dimmest stars visible in the sky—the hypergiant would be as bright as the full moon, "definitely a daytime object," Kastner remarked.

Such hot stars have fierce solar winds, so Kastner and his team are mystified why any dust in the neighborhood hasn't long since been blown away. But there it is: an unmistakable spectral signature that both hypergiants are surrounded by mammoth disks of what might be planet-forming dust and even sand.

At the other extreme is a tiny brown dwarf star called Cha 110913-773444, relatively nearby (500 light-years) in the Milky Way. One of the smallest brown dwarfs known, it has less than 1 percent the mass of the Sun. It's not even massive enough to kindle thermonuclear reactions for fusing hydrogen into helium. Yet this miniature "failed star," as brown dwarfs are often called, is also surrounded by a flat disk of dust that may eventually clump into planets. (This brown dwarf discovery was made by a group led by Kevin Luhman of Pennsylvania State University.)

Although actual planets have not been detected (in part because of the stars' great distances), the spectra of the hypergiants show that their dust is composed of forsterite, olivine, aromatic hydrocarbons, and other geological substances found on Earth.

These newfound disks represent "extremes of the environments in which planets might form," Kastner said. "Not what you'd expect if you think our solar system is the rule." Hypergiants and dwarfs? The Milky Way could be crowded with worlds circling every kind of star imaginable—very strange, indeed.



This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration. By Trudy E. Bell

Caption: Artist's rendering compares size of a hypothetical hypergiant star and its surrounding dusty disk to that of our solar system.

Special Announcement

You Are Cordially Invited to:

Great Basin National Park's Annual

WE'RE NUTS!

(night under the stars)

Messier Marathon

Winter Star Party

Saturday March 5, 2011

We invite you to spend a night under the beautiful dark skies of Great Basin National Park for this year's Messier Marathon.

Astronomer's mixer at 4:00pm PST at the
Lehman Caves Visitor Center
Observing begins at sunset

www.nps.gov/grba

Warm room and hot beverages will be provided

Please invite as many people as you would like

Magic Valley Astronomical Society
P.O. Box 445
Kimberly, ID, USA 83341
http://www.mvastro.org/

Snake River Skies is the Newsletter of the Magic Valley Astronomical Society and is published electronically once a month.

Images on the front page: 1. Centennial Observatory courtesy of Chris Anderson, Observatory Manager. The Centennial Observatory is located at the Herrett Center for Arts and Science, College of Southern Idaho, Twin Falls, ID, USA. Chris Anderson also provides the Planispheres usually on page 3.
2. Shoshone Falls is a major attraction to the Magic Valley and a prominent landmark on the Snake River. Falls image is used under “public domain;” unknown photographer.
3. M-51 on the front page was imaged with the Shotwell Camera and the Herrett Telescope at the Centennial Observatory by club members Rick Widmer & Ken Thomason. 4. Star explorers image is an open source photo, photographer unknown.

Membership Information

Membership is not just about personal benefits. Your membership dues support the work that the Magic Valley Astronomical Society does in the community to promote the enjoyment and science of astronomy.

Speakers, public star parties, classes and support for astronomy in schoolrooms, and outreach programs just to name a few of the programs that your membership dues support.

Annual Membership dues will be $20.00 for individuals, families, $10.00 for students.

Contact Treasurer Jim Tubbs for dues information via e-mail: jtubbs015@msn.com or home telephone: 736-1989 or mail directly to the treasurer at his home address. 550 Sparks Twin Falls, ID 83301

Donations to our club are always welcome and are even tax deductible. Please contact a board member for details.

About the Magic Valley Astronomical Society

The Magic Valley Astronomical Society (MVAS) was founded in 1976, the Society is a non-profit [501(c) 3] educational and scientific organization dedicated to bringing together people with an interest in astronomy.

In partnership with the Centennial Observatory, Herrett Center, College of Southern Idaho - Twin Falls; we hold regularly scheduled monthly meetings and observation sessions, at which we share information on current astronomical events, tools and techniques for observation, astrophotography, astronomical computer software, and other topics concerning general astronomy. Members enthusiastically share their telescopes and knowledge of the night sky with all who are interested. In addition to our monthly public star parties we hold members only star parties at various locations throughout the Magic Valley.

MVAS promotes the education of astronomy and the exploration of the night sky along with safe solar observing through our public outreach programs. We provide two types of outreach; public star parties and events open to anyone interested in astronomy, and outreach programs for individual groups and organizations (e.g. schools, churches, scout troops, company events, etc.), setting up at your location. All of our outreach programs are provided by MVAS volunteers at no cost. However, MVAS will gladly accept donations. Donations enable us to continue and improve our public outreach programs.

A moon just past full as seen from Earth's northern hemisphere. Credit NASA

Membership Benefits

Sky and Telescope group rates. Subscriptions to this excellent periodical are available through the MVAS at a reduced price of $32.95.

Astronomy Magazine group rates. Subscriptions to this excellent periodical are available through the MVAS at a reduced price of $34.00

Receive 10% discounts on other selected Astronomy Publications.

For periodical info. and subscriptions Contact Jim Tubbs, Treasurer

Lending Library: Currently we have no books to lend.

Lending Telescopes: The society currently has two telescopes for loan and would gladly accept others. Contact Rick Widmer, Secretary for more information.

Elected Board

Terry Wofford, President
terrywofford@hotmail.com

David Olsen, VP / Newsletter Ed.
editor@mvastro.org

Jim Tubbs, Treasurer
jtubbs015@msn.com

Rick Widmer, Secretary / Webmaster
rick@developersdesk.com