



# East Valley Astronomy Club

March 2004

www.eastvalleyastronomy.org

Scottsdale, Arizona

March 2004



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## From the Desk of the President

by

**Peter Argenziano  
2004 EVAC President**

*Spring is in the air... time to chase these winter clouds away!*

In recent months the club has been quite active with public outreach events, especially with area schools. While it is always great fun to share the night sky with the general public, it is even more rewarding when the audience is the next generation of amateur astronomers. I extend my sincere appreciation to all those who participate in these events. If you've never participated in an EVAC public star party, please contact our Events Coordinator (Howard Israel) right away! As our weather improves, the frequency of these events will surely increase - so we really need your help! There aren't many things more rewarding than seeing the expression on a youngster's face after their first 'live' view of Saturn. Come on out and join in the fun.

Thanks to the hard work of our VP, Martin Bonadio, the calendar of guest speakers for this year is simply outstanding. Martin has assembled a great mix of professionals and amateurs, along with some very special events. What can I look forward to, you ask? In the coming months: Father Christopher Corbally of the Vatican Observatory will give a presentation entitled "Getting to Know Thy Neighbors: a NASA Survey of Nearby Stars; Paul Scowen (ASU) will tell us about the MDEX mission to understand star formation; Michelle Minitti (ASU) will give us an update on the MER mission, with details on the science results; Tom Polakis will tell us about writing his recently concluded Celestial Portraits series in Astronomy magazine; a special Night of 100 Tips presentation (details in this issue); a combined SAC & EVAC show-n-tell extravaganza; perhaps a special show at Dorrance Planetarium at the Arizona Science Center; and logistics are being finalized for a fall presentation by noted author Phil Harrington.

Speaking of Tom's Celestial Portraits series, many people have asked if it will ever be available in book form. While legal issues revolve around publishing the original essays, special permission has been granted to reproduce the published magazine articles. EVAC is serving as the 'publisher' of this new 'book', which will contain a foreword and index written by Tom, along with reproductions of all published articles - all in a spiral-bound volume suitable for use in the field. This book will soon be available for purchase for the nominal cost of \$5 per copy.

The Saguaro Astronomy Club brings us the eleventh annual All-Arizona Messier Marathon, scheduled for March 20 at Farnsworth Ranch, south of Arizona City. This year 109 objects will be viewable from our location (M30 is the odd one out). The event is free and open to all with no advance registration necessary. EVAC will cover the cost of awards for our members who 'win', 'place' or 'show' in this wonderfully fun event. Complete details are available at the SAC website: <http://www.saguaroastro.org/content/messier.htm>

Hopefully you've been following the Cassini-Huygens mission to Saturn and Titan. In June, a few weeks before entering the orbit of Saturn, the Cassini spacecraft will fly by Phoebe and begin its landmark scientific mission. The distance from which images of Phoebe will be taken is radically different from the early 1980's, when Voyager 2 embarked on its legendary tour of the solar system. Then, Voyager 2's cameras snapped images of Phoebe from about 2.2 million kilometers (about 1.4 million miles) away. Cassini, on the other hand, will snap images from a mere 2,000 kilometers (about 1240 miles) from the moon's surface. In addition, thanks to significant technological improvements throughout the past twenty years, Cassini's cameras are not only far smaller, but also far superior in image quality than their earlier counterparts.

Yet, the dramatically improved optical capabilities are only part of the excitement surrounding Cassini's flyby of Phoebe. Through its high-tech onboard instruments, Cassini will also collect spectroscopic and radar data that could decipher the composition and origin of this tiny, distant moon.

Cassini will begin orbiting Saturn on July 1, and release its piggybacked Huygens probe about six months later for descent through the thick atmosphere of the moon Titan.

No doubt you've seen some of the great images that Cassini is sending back. You really should create a bookmark to the CICLOPS website (Cassini Imaging Central Laboratory for Operations) here: <http://ciclops.lpl.arizona.edu/>

Have you ever seen a solar transit of Venus? No? You're not alone – no one alive today has seen this rare event. The last such transit occurred in 1882. The good news is that the next one happens this year, on June 8. The bad news, especially for those of us in the western US, is that it will not be visible. So, we can either pack our bags and travel to a more favorable location, or do the next best thing: take advantage of the technology that NASA will employ to webcast this historic event from Athens, Greece.

In anticipation of the Venus transit, you may want to participate in another webcast/broadcast, scheduled for March 19. "Venus Transit and the Search for New Worlds" will bring together a panel of top NASA scientists and engineers to discuss

the future of extrasolar planet research, the science behind this rare astronomical event, and how to observe the transit when it occurs on June 8, 2004. Complete details are available here: [http://planetquest.jpl.nasa.gov/venus\\_transit.html](http://planetquest.jpl.nasa.gov/venus_transit.html)

NASA's Sun-Earth Connection Education Forum and San Francisco's Exploratorium will present a live webcast of the Transit of Venus. This event was originally scheduled at the Sierra Nevada Observatory, in the mountains above Granada, Spain. But, weather concerns dictated that an alternate location be selected for a clear and unobstructed view of this amazing and rare event. Museums and community groups around the country and the world will tune in to explore the role of past transits in the history of astronomy and how the Venus Transit was used to calculate the distance from the Earth to the Sun, called the Astronomical Unit. The program will present cutting edge research on Sun-Venus and Sun-Earth interactions, and how NASA plans to use similar transits to detect extrasolar planets. More details will be available as the date approaches.

Looking even further ahead, there is also a transit of the Earth that will be viewable from Mars in November of 2084. So the question is will we have a colonist on Mars who will be able to aim their telescope and view the transit of Earth?

Keep looking up!

---

**EVAC Meeting Minutes**  
February 11, 2004  
Diane Cook – Secretary

President **Peter Argenziano** opened the meeting by welcoming EVAC members and guests. The following announcements were made about club information and upcoming events:

**A.J. Crayon** - March 20<sup>th</sup>, Messier Marathon, Farnsworth Ranch-Arizona City. See SAC link, <http://www.saguaroastro.org/content/messier.htm>

**Jack McEnroe** – new members may sign up or current members may renew using PayPal, or see Jack. [http://www.eastvalleyastronomy.org/evac\\_online\\_payments.htm](http://www.eastvalleyastronomy.org/evac_online_payments.htm)

**Howard Israel** – volunteer opportunities at local schools for Astronomy Fairs. Arizona Science Center is still looking for volunteers.

**Recognition:**

**Tom Polakis** for his latest article on Celestial Portraits, in **Astronomy** (Mar 2004.) Celestial Portraits ran for six years, from April 1998 through March 2004. Tom's 45 articles, which documented 792 objects, covered both celestial hemispheres. Tom offered to make copies of the entire series for those interested for the cost of copying. He is also looking for a book publisher for the collection.

**Rick Scott** for his beautiful calendar photographs.

**Joe Goss** received an award for the EVAC Open Clusters Observing program.

**Member Presentations:**

**Tom Polakis** – new nebula discovery

**Dave Shafer** – "A Flight through the Orion Nebula" – 3D 20mb file downloaded from web, discussion of web cam enhancements

**Joe Orman** – slide show

**Guest Speaker:**

Our guest speaker, **Dr. William Stoeger**, a Jesuit priest and Adjunct Associate Professor of Astronomy at the University of Arizona and Staff Astronomer for the Vatican Observatory, presented theoretical research on Cosmology, multiverses, and the Anthropic principle. The Anthropic Principle can be described as the observation that our universe seems to be "fine-tuned" for complexity and life. If we change 1 or 2 things slightly (i.e. rate of expansion, electromagnetism) our universe becomes unsuitable for life. There are two versions of the Anthropic Principle: 1) weak – allows observers like us to exist, 2) strong – gives rise to multiverses, observers and life; the possibility of a "Creator" or an ensemble of many universes, in which some will be life bearing and fine tuned. The strong version is a highly controversial, philosophical, theological idea.

**If it's clear...**  
**by**  
**Fulton Wright, Jr.**  
**Prescott Astronomy Club**  
**for March 2004**

Shamelessly stolen information from Sky & Telescope magazine, Astronomy magazine, and anywhere else I can find info.

When gauging distances, remember that the Moon is 1/2 a degree or 30 arc minutes in diameter. All times are Mountain Standard Time unless otherwise noted.

**On Monday, March 1**, about 7:20 PM, you can see a dim comet. With binoculars look 15 degrees above the west horizon for Algenib, Gamma Pegasi (mag 3), the left most star in the great square of Pegasus. The fuzzy spot 3 degrees below that star is **comet C/2002 T7 (LINEAR)**. Each night the comet will be lower in the sky. (We will get a better look at it in the morning next month.)

**On Thursday, March 4**, after 10:00 PM, you can see some shadow events on Jupiter. With a medium (6 inch) telescope look in the east for the bright planet. Because Jupiter was at opposition the day before, the satellite and its shadow are right next to each other. Here is the schedule:

**10:06 PM Europa and shadow** on Jupiter  
**12:20 AM Io and shadow** on Jupiter (2 shadows !)  
**12:55 AM Europa and shadow** off Jupiter  
**2:36 AM Io and shadow** off Jupiter

**On Sunday, March 7**, after about 9:00 PM, you can get a good look at **4 big craters** near the limb of the Moon. With a small (3 inch) telescope look for the just-past-full Moon. Scan along the terminator from the east edge, which is slightly right of the top of the Moon at this early hour (slightly left in a scope with a star diagonal), toward the south point, 45 degrees clockwise in a telescope without a star diagonal, counterclockwise with star diagonal. You should see **4 big craters**:

1st **Langrenus** (obvious, with central peak),  
 2nd **Vendelinus** (less obvious, no central peak, smaller craters crowding in)  
 3rd **Petavius** (obvious, with central peak)  
 4th **Furnerius** (less obvious, small crater inside). The view improves slightly as the night progresses and the terminator moves toward the craters.

**On Saturday, March 20 (and into the next morning)** you can see a number of events of Jupiter's moons. With a medium (6 inch) telescope, look in the east for the bright planet. Here is the sequence of events:

**7:24 PM Ganymede** moves in front of Jupiter  
**9:00 PM Ganymede's shadow** falls on Jupiter (1 shadow)  
**9:16 PM Europa** moves behind Jupiter  
**10:14 PM Io** moves in front of Jupiter  
**10:38 PM Io's shadow** falls on Jupiter (2 shadows !)  
**10:45 PM Ganymede** moves from in front of Jupiter  
**12:25 AM Ganymede's shadow** leaves Jupiter (1 shadow)  
**12:29 AM Io** moves from in front of Jupiter  
**12:52 AM Europa** emerges from Jupiter's shadow  
**12:53 AM Io's shadow** leaves Jupiter (0 shadows)

**On Wednesday, March 24**, about 7:30 PM, you can see the **big 6 naked eye wanderers of our solar system**, lined up across the sky along the ecliptic. With your unaided eye, starting in the west, look:


**8 degrees up** for **Mercury** (mag -0.5)  
**35 degrees up** for **Venus** (mag -4.5)  
**right next to Venus** for the **crepuscular Moon**  
**45 degrees up** for **Mars** (mag 1.5)  
**75 degrees up** for **Saturn** (mag 0)  
**35 degrees above the east horizon** for **Jupiter** (mag -2.5).

You can see the same setup the next night except the moon will be near Mars this time.

**On Saturday, March 27 (and into the next morning)** you can see a LOT of events with Jupiter's moons, including a **rare triple shadow**. With a medium(6 inch) telescope, look in the east for the bright planet. Here is the sequence of events:

**7:58 PM Callisto** moves from in front of Jupiter  
**9:56 PM Callisto's shadow** falls on Jupiter (1 shadow)  
**10:43 PM Ganymede** moves in front of Jupiter  
**11:31 PM Europa** moves behind Jupiter  
**11:58 PM Io** moves in front of Jupiter  
**12:32 AM Io's shadow** falls on Jupiter (2 shadows !)  
**12:59 AM Ganymede's shadow** falls on Jupiter (3 shadows !)  
**1:18 AM Callisto's shadow** leaves Jupiter (2 shadows !)  
**2:05 AM Ganymede** moves from in front of Jupiter  
**2:13 AM Io** moves from in front of Jupiter  
**2:47 AM Io's shadow** leaves Jupiter (1 shadow)  
**3:26 AM Europa** appears from Jupiter's shadow  
**4:22 AM Ganymede's shadow** leaves Jupiter (0 shadows)

**On Monday, March 29**, between 7:16 PM and 9:16 PM you can see Io's and Europa's shadows on Jupiter at the same time.



## Mr. Telescope

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# Alien Head Found During Roadside Cleanup!

By Martin Bonadio



*The cleanup crew smiles while secretly plotting ways to lose Martin in the desert*

We had a super turnout for this cleanup effort and I want to thank all those who participated: Dave Shafer, Earle Gilbert, Bill Houston, Ken Trygg, Bill Dillenges, Peter Argenziano, John and Cathy Matthews, Joe Goss, Marty Pieczonka, and Jon Christensen.

Everyone did a fantastic job on the back leg of the new mile. In total we counted 42 bags and have now made one successful sweep of the road. Because this mile had never been cleaned before we had to dig and poke and pull stuff from all kinds of trees and shrubs!

With any “trashy” mile of highway, one would expect to find treasures. This outing was no exception. Bill Dillenges produced an “alien head” during lunch, while David Shafer presented me with what looked to be some interesting photo negatives. I asked Dave *not* to share these with EVAC at an upcoming meeting.... Haha.

Lunch was full of great astronomy chatter, and a popular topic was the background betting that went on when I announced that my 12” LX-200 was too heavy to lift, and that a 14” Celestron on the new EQ mount might be a good cure. Yeah right! Where is the logic in this? We also discussed web cams and talked about the Meade LPI imager and To-U-Cam firmware modifications.

I had a great time, and again, thanks to all for a productive and fun morning and lunch! I’ll plan another cleanup effort in the coming months, so for those who couldn’t join us, there is always the next time. Clear Skies.

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## The Power of Statistics!

*"In the space of one hundred and seventy-six years the Lower Mississippi has shortened itself two hundred and forty-two miles. Therefore ... in the Old Oolitic Silurian Period the Lower Mississippi River was upward of one million three hundred thousand miles long... seven hundred and forty-two years from now the Lower Mississippi will be only a mile and three-quarters long... There is something fascinating about science. One gets such wholesale returns of conjecture out of such a trifling investment of fact."*

Mark Twain

## March Classified Ads.

### Free Classified Ads (Wanted & For Sale)

Noncommercial advertisements for Astronomical equipment, books, computers, or software — Wanted or For Sale — will be accepted from current EVAC members.

Ads will be run on a "space available basis" and may be edited slightly to best fit the space. Ads should consist of a brief text description and must include a current member name and an evening phone number. You may include your email address if you wish. Ads will be run until canceled or until they have appeared in three issues of the newsletter (whichever occurs first). **Ads are "tagged" with the first issue in which they appeared.**

Ads can be emailed to: john-cathy@cox.net  
(this address may change in the future)  
or send by U.S. Mail to:

EVAC PO Box 2202  
Mesa, AZ 85214

Please mark the subject line of the email or the envelope, "EVAC Newsletter Ad."

#### For Sale (January)

I have the following  
telescope/accessories set for sale:

11" Celestron Nexstar GPS w/XLT coatings, bought 9/2003.  
Need to sell quickly due to emergency family medical problems.

\$3500 price includes scope w/ tripod, still under warranty, plus these extras:

In a locking padded custom aluminum-sided Case:

- Celestron anti-vibration pads
- 2" Meade Super Plossl 56mm
- TeleVue Big Barlow 2" 2X
- TeleView Panoptic 2" 35mm
- Celestron 1.25" 4-pc. Filter set #94118
- Celestron 1.25" Filter #94118-05(#21)
- Celestron 1.25" Filter 94118-03(#12)
- Meade 1.25" Nebular O-III Filter #908
- 1.25" Contrast Booster Filter #2458360
- Meade 1.25" 8mm-24mm Zoom
- Celestron 1.25" 2X Barlow
- Meade 1.25" Variable Polarizing System
- Celestron 1.25" E-Lux 40mm Plossl
- Celestron 1.25" 35mm Ultima
- Set of five Celestron X-Cel 1.25 eyepieces:  
2.3mm, 5mm, 8mm, 12.5mm, & 10mm
- Meade Electronic 1.25/2" Focuser
- Meade Focal Reducer
- Meade computer USB-PC Serial port adapter
- custom made adapter for Mac i-Sight FireWire webcam  
(includes i-Sight webcam).

In another Celestron locking padded aluminum-sided case:  
Celestron 5-pc 1.25 Plossl eyepieces

(4mm, 6mm, 9mm, 15mm, 32mm)  
2x1.25" Barlow, and 7-piece filter set.  
(this is the add-on set you got for  
\$99 when purchasing the above scope)

I won't separate or dicker on the price...any of you who know, this is a smokin' deal for this amount of eyepieces, accessories, and the most desirable telescope on the market. It all cost me much more than the asking price. The 1st person with \$3500 cash/check takes it all

**Please call Zach Hilgers  
@ 480-980-0717 to get any more info**

**or email me:  
[noblehousefunding@cox.net](mailto:noblehousefunding@cox.net)  
[drz13@earthlink.net](mailto:drz13@earthlink.net)**

#### For Sale (February)

Orion StarMax 127mm 5" Maksutov-Cassegrain 1540mm focal length f/12.1 with 25mm eyepiece, 6x26 finder scope and telescope carrying case. □ Dual axis drive that's never been used. □ With AstroView equatorial mount. □ don't want to deal with shipping, so for sale in the Phoenix Area only. □ \$400.00

**Call Damion Pauksta at 602-240-5421 □  
[damionbow@aol.com](mailto:damionbow@aol.com)  
□**

#### For Sale (February)

Celestron NexStar 114GT Mount

Mount only - no OTA. Includes GoTo hand controller with 4,000 object database, tripod and manual. Adapters for attaching small refractors are commercially available. One year old. \$75.00

Also, Televue 12mm Nagler (Type 2). Fits 2" or 1.25" focuser. \$150.00

**Contact Sam or Anne  
[Sam&Anne@pobox.com](mailto:Sam&Anne@pobox.com)  
480-924-5981**

## Prepared by Howard Israel

		<b>EVAC Events</b>	
		<b>March Events</b>	
Wed. Mar. 3	School Observing Event	Dobson Academy Chandler, AZ	Observing the Moon
Thu. Mar. 4	School Observing Event	Taft Elementary School	Setup 6:00PM
Wed. Mar. 10	General Meeting	SCC-PS 172	Fr. Chris Corbally Know Thy Neighbors
Fri. Mar. 12	Public Star Party	Gilbert Library	7:00 PM Setup
Sat. Mar 13	Beginners Lab	Dave Coshows' home	7:00 PM Setup
Sat. Mar 13	Local Star party	Boyce Thompson Arboretum	Sunset: 6:35PM
<b>Sat. Mar. 20</b>	<b>Messier Marathon</b>	<b>Farnsworth Ranch Arizona City</b>	<b>Sunset: 6:40 PM</b>
Sat. Mar. 20	Deep Sky Star Party	Vekol Road	Sunset 6:40PM
Sat. Mar. 27	4th Annual Feathered Friends	Riperian Preserve	Solar Viewing
Wed. Mar. 31	Observing Event	Sunland Village, Mesa, AZ	Setup 6:30PM
		<b>April Events</b>	
Fri. Apr.2 – Sun	Outdoors Women Workshop	Prescott, Arizona	Volunteers needed
Sat. Apr.3	Beginners Lab	Dave Coshows' home	7:00 PM Setup
Fri. Apr. 9	Public Star Party	Gilbert Library	7:00 PM Setup
Wed. Apr 14	General Meeting	SCC-PS 172	7:30PM Prof. Paul Scowen, ASU
Sat. Apr. 17	Deep Sky Star Party	Vekol Road	Sunset 7:01PM
Sat. Apr. 24	Local Star party	Boyce Thompson Arboretum	Sunset: 7:06PM
Mon. Apr. 26	Lecture-Mapping the Universe	Arizona Science Center	Prof. M. Haynes Reception, 5:30PM
		<b>May Events</b>	
Sat. May 1	Beginners Lab	Dave Coshows' home	7:00 PM Setup
Sat. May 8	Local Star party	Boyce Thompson Arboretum	Sunset: 7:17PM
Wed. May 12	General Meeting	SCC-PS 172	7:30PM Guest Speaker TBD
Thu. May 13 - 16	Desert Sunset Star Party	Tucson, AZ	<a href="http://chartmarker.tripod.com">http://chartmarker.tripod.com</a>
Fri. May 14	Public Star Party	Gilbert Library	7:00 PM Setup
Sat. May 15	Deep Sky Star Party	Vekol Road	Sunset 7:21PM
Sat. May 15	Astronomy Day	Arizona Science Center	Volunteers needed
Fri. May 28 – 30	RTMC Astronomy Expo	Big Bear City, CA	
		<b>Upcoming Events</b>	
June 17 – 20	The Lowell Star Party	Flagstaff, AZ	See EVAC Event Calendar
June 12 – 19	Grand Canyon Star Party	North and South Rim	<a href="http://www.tucsonastronomy.org/gcsp.html">www.tucsonastronomy.org/gcsp.html</a>

# The Backyard Astronomer

Bill Dellinges (2/16/04)

## The “Forgotten” Italian Astronomers

Buongiorno! Most astronomy enthusiasts are familiar with Galileo’s telescopic exploits (1610), Giovanni Cassini’s discovery of Saturn’s Cassini’s Division and four of its moons (1671-84), and Giovanni Schiaparelli’s Martian observations and resultant “canal” controversy. But was that it? No. Italian astronomical history is rich in its unsung heroes. Let us ask Herschel, Messier, and Hubble to step aside for a moment while we examine several neglected Italians who made contributions to astronomy.

### **Giovanni Hodierna (1597-1660)**

A document discovered in 1984 indicates Hodierna, using a small refractor with 20x, cataloged 40 objects in his *De Admirandis Coeli Characteribus* from Palermo, Sicily (1654). He is credited with discovering M6, 36, 37, 38, 41, 48, and NGC 2362, 6231, 6530, and 2451. Thus he preceded Messier with his own list of deep sky objects by over 100 years. He also diagrammed three Trapezium stars in the Orion Nebula, perhaps the first drawing of this famous group of stars.

### **Giovanni Riccioli (1598-1671)**

Philosopher, theologian, astronomer. Credited with being the first person to discover a double star, Mizar, in 1650. Laid the foundation for lunar nomenclature still used today such as Mare Imbrium, craters named after noted astronomers and personalities, and mountain ranges like the Apennines. Interestingly, he preferred the solar system model of Tycho Brahe (where the other planets orbited the Sun and the Sun orbited the Earth) over the Sun centered Copernican system.

### **Geminiano Montanari (1633-1687)**

Professor of mathematics at the Italian University of Bologna, he observed and described the variability of Algol from 1667 to 1670, apparently the first to do so. It would be John Goodricke (1764-1786) who in 1782 suggested this variability was caused by an eclipsing binary system (and not an intrinsic variability as in the case of Mira). Goodricke, deaf and dumb, was a promising astronomer but died at 21.

### **Giuseppe Piazzi (1746-1826)**

Founder of the Palermo Observatory in Sicily. Discovered the first asteroid, Ceres, on January 1, 1801. Piazzi found this object before the search even began for the “missing” planet between Mars and Jupiter as predicted by Bode’s Law. Johann Schroter was planning to attack this problem with other astronomers (“Schroter’s Celestial Police”) when Piazzi stumbled across it while making a star chart. [Interesting historical point: apparently Piazzi’s assistant, Niccolò Cacciato, pulled a fast one in the Palermo Catalog of 1814. The stars Alpha and Beta Delphini were listed as Sualocin and Rotanev. Their origin remained a mystery until the Reverend Thomas Webb noticed they spelled backwards the latinized form of Cacciato’s name, Nicolaus Venator]. To see how three astronaut names made their way via a similar fashion into star charts, see the April 2003 issue of *Sky&Telescope* magazine, page 90.

### **Angel Secchi (1818-1878)**

Jesuit priest and astrophysicist. Director of the College Romano. A pioneer in stellar spectroscopy, his four classes of spectral types eventually resulted in the familiar OBAFGKM Harvard system. Secchi also did research in magnetism, meteorology, and double stars. He proved prominences seen on the sun’s surface during eclipses were features on the sun itself. On his 1858 map of Mars, he first used the term “canali”-19 years before Schiaparelli.

### **Giovanni Donati (1826-1873)**

Director of Florence Arcetri Observatory from 1859-1873. Discovered seven comets including Comet Donati 1858 VI, a very bright comet with a long tail. Another pioneer in spectroscopy, Donati obtained the first spectrum of a comet in 1864 (Tempel 1864 II).

A few additional contributions by our Italian friends:

Like your binoculars? Thank **Ignatio Porro**, who invented the porro prisms in 1854. Don’t forget **Giovanni Amici’s** erect view Amici prism and straight through visual spectroscope (1860).

### **G. Schiaparelli (1835-1910)**

(Hey, two Halley’s Comet apparitions!) also studied Mercury and Venus, although he wrongly determined their rotation periods. He discovered the asteroid Hesperia in 1861, connected comet Swift-Tuttle with the Perseid meteor shower, and created the Martian nomenclature we use today, including what he noted as “Nix Olympica”, what we know today as the solar system’s largest volcano, Olympus Mons.

**Alessandro Piccolomini** produced what is considered by some as the first printed star atlas in 1540.

**Giuseppe Lagrange** (1736-1813) discovered the so-called “Lagrange Points”.

**Eustachio Divini** (1620-?). Planetary observer with telescopes built by himself. Observed Saturn’s rings before Huygens. Invented the thread micrometer.

**Vincenzo Cerulli** (1856-1927). Studied Mars with a 15 1/3” inch refractor built by Thomas Cook and refuted the “Canals” of Mars. Discovered the asteroid 704 Interamnia.

As you can see from the above, the Italians played a considerable role in the advancement of astronomy. I would like to thank Enrico Moltisanti of Turin, Italy for his help with this article. We have been email pals since both our observatories were featured in the February, 1999 issue of *Sky and Telescope*, page 127 and 129.

Arrivederci!

# Your Tip Counts!

By Martin Bonadio

We have an exciting night planned for our upcoming September 2004 EVAC general meeting. So special, we are calling it the "Night of 100 Tips". And we need your help. Our goal is to put together a presentation that encompasses tips from our members. Those tips will be compiled into a keepsake newsletter article pullout, emblazoned on our club website, and the focus of a presentation during that month's general meeting.

What's exciting is that each of you has the chance to become a featured guest speaker! All we need is your tip. Share with the club one or two observational, planning, telescope, or related item. The more tips the merrier, as everyone will be able to benefit from them. During the presentation numerous tips will be presented along with credit (if desired). We'll try to share as many tips as we can that night! Wow!

We are also making final plans to host a first ever beginners workshop in the SCC planetarium from 6:30 – 7:30pm, September 8<sup>th</sup> (before the meeting). Once finalized, there will be a sign-up sheet for up to 30 people. At the workshop a presentation on learning the night sky will be followed by host EVAC members sharing with you tips on telescope and eyepiece selection, star charting, and other beginner topics. If successful the beginner's workshop will possibly become a quarterly event for EVAC meetings!

I'm excited about this upcoming meeting, and I hope you will share your tips with us! Everyone's tip counts! You can email your tip to Martin Bonadio at [mbonadio@cox.net](mailto:mbonadio@cox.net). A form will soon be placed on the club website where tips can also be submitted electronically. Feel free to attach pictures or diagrams that you think are helpful. You can also fill in the space below and give it to Martin at any meeting between March and August.

Your Name	
Tip Title	
Tip	

## Our March Speaker

Father Christopher J. Corbally, S.J., is a Vice Director of the Vatican Observatory. As such, he oversees the Observatory's research group in Tucson, while maintaining contact and occasional visits to the Observatory's headquarters at Castle Gandolfo, Italy. He is an Adjunct Associate Professor at the Department of Astronomy, University of Arizona.

Father Corbally was born in England and entered the British Province of the Society of Jesus (Jesuits) in 1963. His training included a Licentiate in Philosophy from Heythrop College, Oxon., a B.D. in Theology from London University, and a Ph.D. in Astronomy from the University of Toronto.

His scientific research centers around the technique of classifying stars by their spectra. This leads him into problems of the structure and history of the Milky Way Galaxy, into the formation and dynamics of systems of multiple stars, and into many aspects of the evolution of stars. He was the Project Scientist for the first of the Observatory's telescopes to be built outside of Vatican City State, the Vatican Advanced Technology Telescope on Mount Graham, Arizona.

His topic will be: "Getting to Know Thy Neighbors: A NASA Survey of Nearby Stars."



# East Valley Astronomy Club Membership Form

Please complete this form and return it to the club treasurer at the next club meeting OR mail to EVAC, P.O. Box 2202, Mesa, AZ 85214, with a check or money order made payable to EVAC.

**IMPORTANT:** ALL memberships expire on December 31, of each year.

**New Member Only - select month joining:**

- \$20.00 January – March
- \$15.00 April – June
- \$10.00 July – September
- \$25.00 October – December & Next Year

**Membership Renewals:**

- \$20.00 January – December

**Name Badges:**

- \$7.00 each Name: \_\_\_\_\_

**Magazines:** if renewal, customer # \_\_\_\_\_

(New) (Renewal)

- \$29.00 /yr Astronomy Magazine
- \$32.00 /yr Sky & Telescope

**Newsletter delivery option, check one:**

- Email (saves club printing & postage)  U.S. Mail

**Total enclosed \$**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone # ( ) \_\_\_\_\_

Email: \_\_\_\_\_

URL: \_\_\_\_\_

**Local Star Party Sites**

**# 1: Florence Junction Site**

**General Information:** The Florence Junction site is one of the two official sites for the East Valley Astronomy Club's Local Star Parties, typically held on the Saturday closest to Last Quarter Moon. Florence Junction offers reasonably dark skies within a short drive of most East valley locations. EVAC's Land Use Permit #26-104528 applies to this site.

**Location:** N 33° 14' 40" W 111° 20' 16"

**# 2: Boyce Thompson Arboretum Site**

**General Information:** The Boyce Thompson site is still considered the new local site. Only a few Star Party have taken place there as a second local site, although EVAC members have held Star Parties there at the request of the Arboretum on a twice yearly basis. The site has some privacy advantages over the FJ site.

**Location:** N 33° 16' 52" W 111° 09' 35"

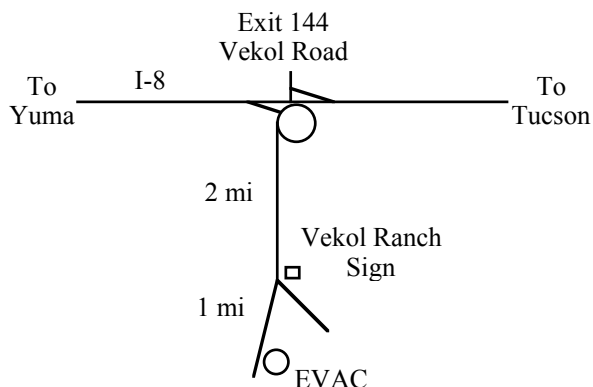
**How to get there:** Drive East on US 60 past Florence Junction for both sites. About 3.7 miles East of Florence Junction (after crossing railroad tracks) you will see a (second) flagpole on your right. Turning right (South) here and following the dirt road for 0.6 miles you will reach the FJ #1 site (marked by an old corral on your left). Continuing past the flagpole turn-off on US 60 and over Gonzales Pass will bring you to the Boyce Thompson Arboretum just before you enter the town of Superior. The Arboretum is marked with a large brown and white State Park Sign and there is a right turn lane.

**Deep Sky Star Party: Vekol Road Site**

**General Information:** The Vekol Road site is the official site for the East Valley Astronomy Club's Deep Sky Star Party, typically held on the Saturday closest to New Moon. Vekol Road offers dark skies despite prominent sky glow from Phoenix to the North. The site is within 90 minutes drive time from most East Valley locations.

**Location:** N 32° 47' 55" W 112° 15' 15"

**How to get there:** Take I-10 South and exit onto Maricopa Road. Continue through the town of Maricopa to SR 84, about 25 miles from I-10. Turn right on SR 84, after about 5 miles the road merges with I-8. Continue West and exit I-8 at Vekol Road-Exit #144. Turn left and cross the highway overpass. Before looping back onto I-8 take the small road (now paved) to the left. Go South for 2 miles. At the Vekol Ranch sign bear right and continue South for another mile until reaching a large open area on the left.



**EVAC Officers**

**PRESIDENT**

Peter Argenziano  
(480) 633-7479

**VICE PRESIDENT**

Martin Bonadio  
(480) 926-4900

**TREASURER**

Jack McEnroe

**SECRETARY**

Diane Cook

**EV. COORDINATOR**

Howard Israel  
(480) 893-7523

**PROPERTIES**

Dave Williams

**NEWSLETTER**

John Matthews  
(602) 952-9808

**WEB MASTER**

Marty Pieczonka

**East Valley Astronomy Club**

EVAC Homepage: <http://www.eastvalleyastronomy.org/>

**Membership & Subscriptions:** \$20 per year, renewed in December. Reduced rates to *Sky & Telescope* and *Astronomy* available. Contact the Treasurer:  
Jack McEnroe at: [keystoneconsulting@earthlink.net](mailto:keystoneconsulting@earthlink.net)

**Address Changes:** Contact: Jack McEnroe. PO Box 2202 Mesa AZ 85214-2202

**Club Meetings:** Second Wednesday of every month at the Scottsdale Community College, 7:30 p.m. Meet in Room PS 172 (Physical Science Bldg.).

**Newsletter:** Email John Matthews at: [john-cathy@cox.net](mailto:john-cathy@cox.net) The newsletter is mailed out the week before the monthly Club meeting. An electronic version is available in Adobe PDF format in lieu of the printed copy. Please send your contributions to John Matthews at: [john-cathy@cox.net](mailto:john-cathy@cox.net) Contributions may be edited.

**EVAC Library:** The library contains a good assortment of books, downloaded imagery, and helpful guides. Contact Dave Williams at: [davewilliams@cox.net](mailto:davewilliams@cox.net)  
**Book Discounts:** Kalmbach and Sky Publishing offer a 10% discount to EVAC members on books and other items from their catalog. When ordering, notify the person on the phone that you would like the "Club Discount." When ordering by mail, there is a line to subtract the club 10%.

**EVAC Star Party Line:** Let other members know in advance if you plan to attend a scheduled observing session. Contact Events Coordinator Howard Israel at (480 893 7523).



**East Valley  
Astronomy Club**

**EVAC  
PO Box 2202  
Mesa, AZ 85214**

**EVAC Homepage:  
[www.eastvalleyastronomy.org](http://www.eastvalleyastronomy.org)**

**Reminders:**

**March EVAC Meeting  
Wednesday, Mar. 10, 2004**

Location: Room PS - 172  
Physical Science, (SCC) @ 7:30PM

**April EVAC Meeting  
Wednesday, April. 14, 2004**

Location: Room PS - 172  
Physical Science, (SCC) @ 7:30PM