

The Rosette Gazette

Volume 25, Issue 02

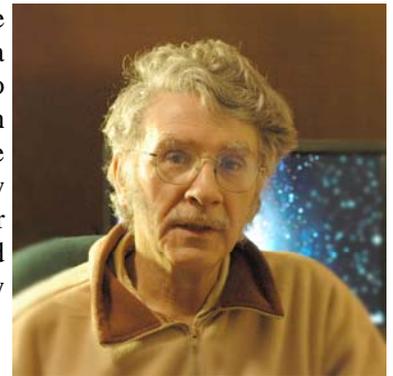
Newsletter of the Rose City Astronomers

February, 2012



The First Really Big Telescopes and the Discovery of the Universe by Richard Berry

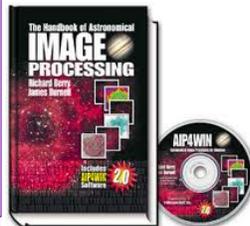
William Herschel and his son John Herschel carried out the first comprehensive surveys of deep-sky objects and created a catalog we now call the New General Catalog, or NGC. To do this, they built and used the first really big telescopes with what today we consider primitive technology. I will describe the telescopes these early amateur astronomers built, and show that they were well designed and effectively employed tools for discovery. The story of the Herschels begins in about 1780 and continues through about 1835. Join me in a fascinating journey into the discovery of the Universe and the people who did it.



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Richard Berry is an author, editor, and software programmer focused primarily on amateur astronomy. His books include a classic, *Build Your Own Telescope*, a popular introduction to observing, *Discover the Stars*, the acclaimed manual for big Dobs, *The Dobsonian Telescope* (with David Kriege), and the book best known to NEAIC attendees, *The Handbook of Astronomical Image Processing* (with Jim Burnell), which includes the *Astronomical Image Processing for Windows (AIP4Win)* software widely used for image processing as well as both photometry and astrometry.



At age 13, Richard built his first telescope (a 6-inch f/7 Newtonian) and moved on to construct an 8-inch f/10 planetary telescope, a 6-inch RFT, a 12-inch f/7 Newtonian, and an 8-inch Dall-Kirkham Cassegrain. He observed all of the planets, most of the Messier objects, and made deep inroads into the NGC catalog. In those distant days of darkroom chemistry and bromide paper, he specialized in lunar and planetary astrophotography.

(Continued on page 2)



RCA is a member of the
Astronomical League.
<http://www.astroleague.org>

All are Welcome! Monday February 20th
Social Gathering: 7 pm. General Meeting Begins: 7:30 pm.
Location: OMSI Auditorium

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Trout Lake Star Party photo above courtesy Michael Minnhaar
Moon photos below courtesy David Haworth

Last Quarter Moon
Feb 14

New Moon
Feb 21

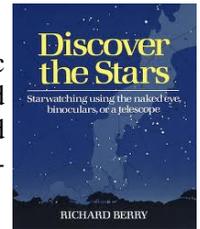
First Quarter Moon
Feb 29

Full Moon
Mar 07



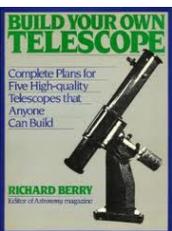
(Continued from page 1)

After majoring in astronomy for his B.A. degree, Richard went on to present a thesis on photoelectric photometry earning an M.Sc. in astronomy. In the technology world, he has designed rocket payload instrumentation, measured air pollution (ozone and hydrogen sulfide) using a laser beam, and tested key components for the Ultraviolet Absorption experiment (MA-059) flown aboard the Apollo-Soyuz Test Project.

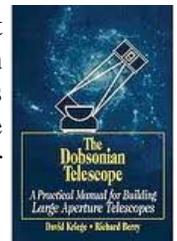


Switching from technology to editing, Richard served a ASTRONOMY magazine's Technical Editor, then Editor, and finally Editor-in-Chief, for sixteen years, and played a key role in building the fledgling magazine's circulation from 38,000 in 1976 to its peak at 252,000 in 1988. During his years at ASTRONOMY, Richard built a strong, effective, and knowledgeable editorial staff, and worked tirelessly to ensure that manufacturers present only honest and accurate claims in their advertisements.

During his years at ASTRONOMY, Richard founded and edited *Telescope Making*, a quarterly magazine devoted to the community of amateur telescope makers. From 1978 through 1991, *Telescope Making* introduced its readership to the Dobsonian telescope, the Poncet platform, tilted-component telescopes, and many examples of outstanding amateur observatories.



From 1992 to the present, Richard has written and coauthored a string of books about telescope making, imaging with CCD cameras, and image processing. He has given countless talks and participated in workshops at conferences around the world. His current book, due out this summer or fall, is a comprehensive ray-trace analysis of the telescope, eyepiece, and astrographic camera designs available to today's amateur astronomer.



Special Interest Groups

Astro-Imaging Special Interest Group

When: Monday, March 12th, 7pm
Location: Beaverton Public Library
Conference Room
12375 SW 5th St
Beaverton

SIG Leader: Greg Marshall
Email: ai-sig@rosecityastronomers.org
<http://www.rosecityastronomers.org/sigs/astroimage.htm>

Junior Astronomers

When: Monday, February 20th, 6:30pm
Location: OMSI Classroom 1
Meets prior to and during the general meeting
Topic: First meeting

Leader: Ada Hays
Email: youth@rosecityastronomers.org
<http://www.rosecityastronomers.org/sigs/science.htm>

Downtowners Luncheon

When: Friday, March 2nd, Noon
Location: Kell's
112 SW Second Ave. Portland

SIG Leader: Margaret Campbell-McCrea
Email: downtown-sig@rosecityastronomers.org
<http://www.rosecityastronomers.org/sigs/downtowners.htm>

New Members Special Interest Group

When: Monday, March 19th, 6:30pm
Location: OMSI Planetarium
Topic: TBD

SIG Leader: Howard Knytych
Email: newmembers@rosecityastronomers.org
http://www.rosecityastronomers.org/sigs/new_members.htm

Telescope Workshop

When: Saturday, March 3rd
10:00am - 3:00pm
Location: Technical Marine Service, Inc.
6040 N. Cutter Circle on Swan Island-Portland

SIG Leader: John DeLacy
Assistant: Don Peckham
Email: tw-sig@rosecityastronomers.org
<http://www.rosecityastronomers.org/sigs/tmw.htm>

Astrophysics / Cosmology SIG

When: Wednesday, February 22nd, 7pm
Topic: To Be Announced

Presented by: To Be Announced
Location: Linus Pauling House
SIG Leader: Lamont Brock
Email: cosmology-sig@rosecityastronomers.org
www.rosecityastronomers.org/sigs/cosmology.htm

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RCA MAGAZINE SUBSCRIPTIONS

One of the benefits of RCA Membership is a reduced rate subscription to Sky & Telescope and Astronomy magazines. The RCA member rate for Sky & Telescope Magazine is \$32.95 for one year or \$65.90 for two years. The RCA member rate for Astronomy magazine is \$34 for one year or \$60 for two years. For more information go to the RCA web site index and click on the link for magazines. Please make checks out to "RCA" and allow two months for your subscription to be renewed.

<http://www.rosecityastronomers.org/magazines/>
 Larry Godsey <magazines@rosecityastronmers.org>



RCA LIBRARY

The Rose City Astronomers maintains a comprehensive club library of astronomy related articles, books, CDs and videos. These items can be borrowed by members through checkout at the general meetings for a period of one month with renewals available by phone or e-mail to the club library director. The RCA library is constantly growing through many donations and the purchase of new materials. A listing of library materials (PDF format) can be found at the library web page.

<http://www.rosecityastronomers.org/library.htm>
 Jan Keiski <library@rosecityastronomers.org>

The Apparent Diameter of a Star

By Peter Abrahams.

Among the 'receding goals' of astronomy is obtaining an image of the disk of a star, and details on the disk of a star.

This was brought to mind by a remarkable event of 02 Jan 2012 (21:25 UT) - the occultation of Betelgeuse by Asteroid (147857) 2005 UW381. Visible in south western Asia, this tiny (possibly 2 mile diameter) asteroid passed in front of Betelgeuse, which is much larger in apparent diameter, and as a result the magnitude of Betelgeuse was predicted to drop by perhaps 0.01 magnitude, for perhaps 3.6 seconds. As of this writing (04 Jan.), no results are searchable on the internet.

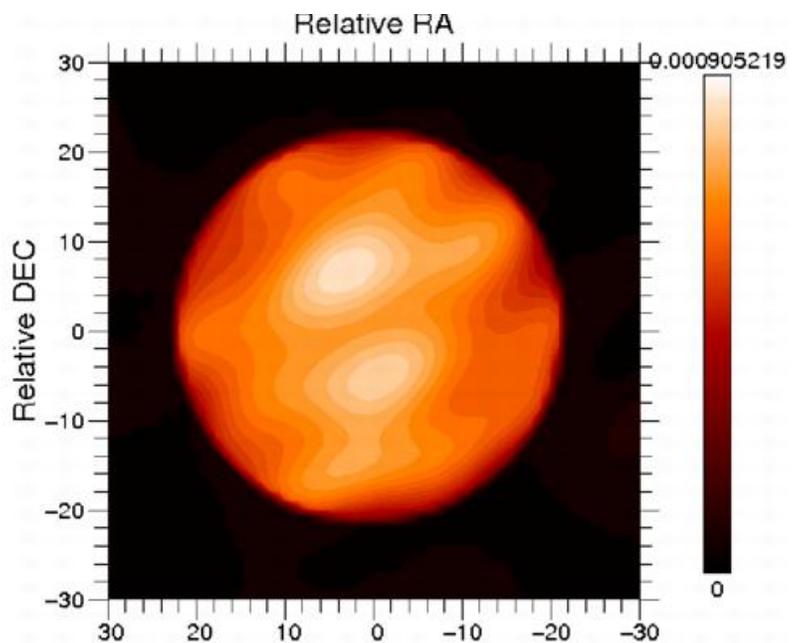
I find this 'remarkable' for two reasons. First is the ability to predict such an event, and the amazing accuracy of positional astronomy, given the perturbations and irregularities of the rotating, orbiting surface of the earth. Second is the newly observable disc-like nature of the star as observed from earth. Stars have been 'points' for most of the era of telescopic astronomy, and in recent years imaging has progressed to allow features of stellar disks to be resolved. (Actually stars were disks even before they were points, but that was a misinterpretation of the diffraction disk produced by optics.)

Some examples of stellar disks:

The (nonsolar) star with the largest apparent diameter is R Doradus (a red giant Mira variable in the southern hemisphere), with an angular diameter of 0.057 arcseconds (57 milliarcsec), measured with ESO's NTT using IR interferometry. R Doradus has a diameter equaling the orbit of Mars.

The angular diameter of Betelgeuse was measured at 0.044 arcsec by Albert Michelson using the 100 inch reflector at Mt. Wilson in the early 1920s. Current estimates are 0.043 to 0.056 arcseconds.

In 1996, HST imaged the surface of Betelgeuse using UV; the ultraviolet diameter is about twice the optical diameter, because the chromosphere is visible in UV. This was a direct image, without interferometry. In 2010, the Infrared Optical Telescope Array interferometer on Mt Hopkins acquired a superior image of Betelgeuse.



The surface of Betelgeuse in near infrared at 1.64 micron in wavelength, obtained with the IOTA interferometer (Arizona). The image has been re-constructed with two different algorithms, which yield the same details, of 9 milliarcseconds (mas). The star diameter is about 45 milliarcseconds. Credit: Copyright 2010 Haubois / Perrin (LESIA, Observatoire de Paris)

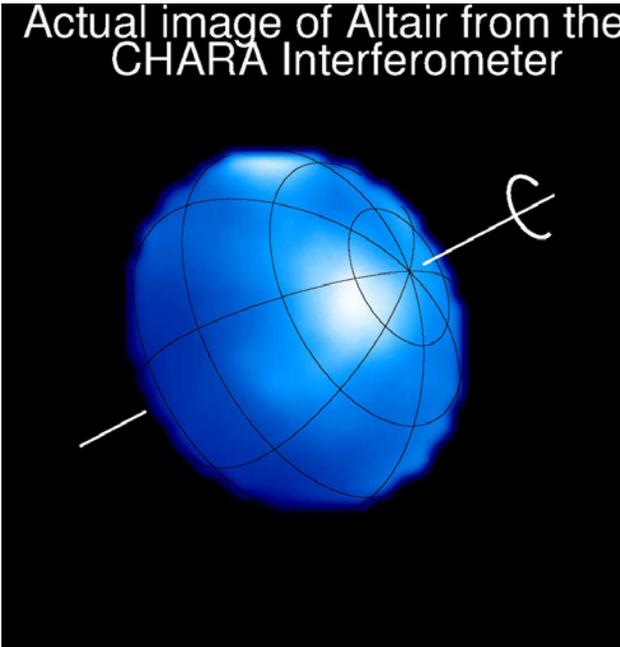
Altair's apparent diameter is .032 arcseconds.

Aldebaran is .021 arcseconds in diameter from our location.

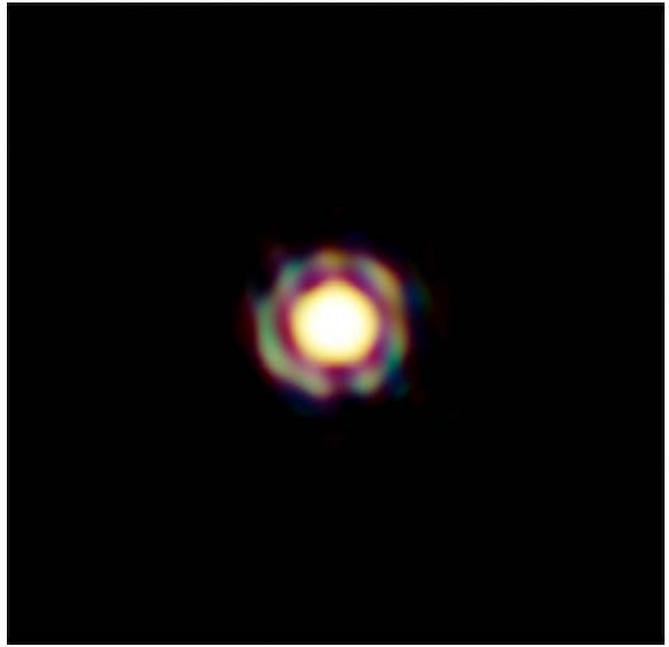
Antares measures .020 arcseconds (20 milliarcsec).

The CADARS list (Catalogue of Apparent Diameters and Absolute Radii of Stars), found at Vizier, includes measured diameters for over 9700 stars.

Actual image of Altair from the CHARA Interferometer



The disk of Altair was imaged in 2007 by CHARA (Center for High Angular Resolution Astronomy) on Mt Wilson.



The surface of T Leporis was imaged in 2009 by the Very Large Telescope auxiliary telescope interferometer.

Astrophoto of the Month

I would like to start a new column featuring one or two astronomy related photos from our readers. If you would like to submit a photo please send it with details in an email to the editor.

To start this off, this months astrophoto of the Rosette Nebula comes to us from Greg Marshall.

NGC 2237 - Rosette Nebula

Scope: AT111EDT with WO Flat 4 0.8x FR/FF
Mount: AP Mach1
Guiding: Meade DSI Pro and PHD Guiding
Guide Scope: Orion ST80
Camera: QSI 583 at -25C
Exposure: 15 x 480s H-a, 15 X 480s O-3 (2x each for mosaic) (8 hrs total)
Processing Software: Acquired, calibrated and stacked in MaxIm DL, further processing in Photoshop, including Carboni tools and Noise Ninja

I had intended to add some RGB data to this image, but maybe that will have to wait until I can get to a dark sky site. Or at least until near the new moon! This version is just H-alpha for red and O-3 for green and blue.



A Convenient “Grab & Fly” Telescope Setup

February, 2012

By Tom Koonce

Lancaster, California

Have you ever headed out on a long trip and wished that you could do a little star-gazing once you arrived at your destination? But perhaps you have thought about the logistics of traveling with a telescope like the inconvenience of getting your telescope equipment through airport security, potential damage to the telescope, or maybe been daunted about what eyepieces and accessories to take? This article could help you to stop worrying... and start packing.

I had a unique opportunity to travel “down under” to observe from the dark skies of south central Australia, east of Melbourne, and then from the large island of Tasmania located off the southern tip of Australia. I knew I had to take a telescope with me or I’d certainly regret it. Major airlines fly into Melbourne, but only small “regional” airlines fly into Tasmania, so the amount of baggage I could take on the three week trip was strictly limited to a total weight of 23 kg (50.7 lbs). My astronomy setup would have to fit into an already limited volume that included work attire, a bulky jacket, shoes, shaving kit, notebooks of work materials, and a laptop. While the observing portion of this trip was secondary to the business portion of this trip, it was still very important to me personally and deserved careful planning ahead of time.

Some of my initial questions to be answered were concerning the climate of the location. Would it be hot or cold this time of year? Cloudy or clear? Dark skies or urban light pollution? My excitement grew as each of these answers were favorable to potential great southern sky views of the Clouds of Magellan, Southern Cross, Alpha Centauri, Canopus, the Coal Sack, the Tarantula Nebula, and on and on. Wow.

Now what telescope should be taken? It had to be portable, deliver wide-field views when paired with one or two eyepieces, but be of sufficient quality that I could “crank up the power” if I wanted to. It needed to be rugged enough to survive the jostling of going through security (I foresaw a major hassle regarding this) and the vibration shock of the flight and maybe a rough landing. It also needed to be light enough to be supported by a photo tripod since such a tripod was the only possible support within my weight and luggage volume limitations. The Tele Vue Pronto ED doublet refractor telescope with a 480 mm focal length, f/6.8 and an objective diameter of 70 mm was chosen. I had purchased a Pronto in mint used condition from a friend for \$500 several years ago and loved it. When this short refractor is paired with both a Tele Vue 13mm Ethos and an 8mm Ethos, it can provide stunning views. The scope was also fitted with a 90 degree prism, two inch eyepiece focuser, a glass solar filter and a simple red dot sight.

I made a new foam insert for the stock Tele Vue Pronto padded carry bag to fit the telescope, both Ethos eyepieces, the right angle prism and accessories. I chose a closed cell foam with sufficient density to provide cushioning for all of the items, but rigid enough to hold each item securely. The solar filter, small red flashlight, my small southern sky atlas, dust blower and an O-III filter had to be carried in a 1 gallon ziplock in my suitcase, but still I was pleased that I managed to get my observing essentials down to such a small package.

The tripod I chose was the Manfrotto "Bogen" Carbon Fiber Tripod (BOG190CXPRO4) with a stan-

(Continued on page 7)

ard ball head. The entire tripod was no longer than the Pronto's carry case and I attached to the case with Velcro straps. The tripod was very light, but surprisingly stable with the 6 lb Pronto, diagonal, and with a 2 lb Ethos eyepiece mounted on it. Its maximum load was stated to be 11 lbs. The lack of a celestial drive was not an issue for my visual observations made with this setup. Also the time to setup and take down was less than 5 minutes. There was the expected difficulty looking at any object at zenith with this setup. To be honest, a big reason why I chose this tripod was because a friend offered to let me borrow one for the trip, and it's hard to argue with "free". It is an expensive tripod, but a perfect "Grab and Fly" match for this telescope setup.



The "Grab and Fly" Telescope Case and Contents

Before the trip I had a concern regarding what this telescope/eyepiece/tripod package would look like to the airport security folks on their scanners since they probably didn't see too many telescopes come through as carry-on baggage? Primarily because of this, an extra hour was planned for security questions prior to the flight. I could have relaxed. I had no fluids (of course) in the bag, and nothing looked like a weapon on the X-ray. The TSA was very reasonable and had no problems whatsoever with the telescope. They did ask me what it was, to which I told them it was a "telescope lens", and then they sent me on my way. I was to my gate with an extra hour to spare. Once on the plane, this entire setup conveniently fit into an overhead aircraft bin, even on the regional-type aircraft from Melbourne south to Tasmania.

The trip allowed me ample time to observe the southern sky. The telescope setup worked like a champ. While I only used the solar filter once, I had the telescope out every night for at least two hours and all night long on the weekends. The weather in Tasmania had me chasing openings in the clouds for a couple of nights, but it cleared up and provided the darkest observing skies I have ever seen in my life. Regrettably the 70mm Tele Vue Pronto isn't made anymore, but its been replaced by its close (more expensive) cousin, the Tele Vue 76 APO Doublet Refractor.

While this article has been about the selection of a convenient "Grab and Fly" telescope that could be taken anywhere one may be headed, I haven't said much about the deep sky views I had on my trip, of the hours I spent smiling, ear-to-ear, as I leisurely cruised from the Tarantula Nebula over to the Clouds of Magellan, or mention the friendliness of the Australian amateur astronomers I met. Those experiences were the real story made possible by having a "Grab and Fly" telescope.

Telescope Reviews:

Pronto: <http://www.company7.com/televue/telescopes/pronto.html>

Ranger: <http://www.company7.com/televue/telescopes/ranger.html>

Creating Quantum Art

The alpha helix to carbon stars

By Bob McGown

Science and art can show us something about reality. Abstract art like modern science can be very profound and can help us wrap our mind around a complex idea or concept. To something as complex as quantum physics, language may be only like abstract art.

While I was in Lugarno, Switzerland for the Transit of Venus with physicist Maurice Stewart, and science writer Dareth Murray, I had the opportunity to view 3 meter gold plated quantum sculptures all over the city. The quantum art seemed to take you out of the reality that you were in and take you to another plane of existence.

In a forest south of the Oregon Food Bank faculty is a 15-foot diameter "Buckyball" carbon-60 atom steel sculpture. Blending in with the surroundings, the structure looks like a transparent molecule in space. The sculptor-physicist Julian Andre-Voss tacked the rebar together standing on the top rung of an extension ladder with his mig welder cranked up to the maximum. After setting up the Acetylene bottle and mig welder on a scaffold, Julian used a series of wooden jigs to set up the angles on the rebar. The ultimate challenge was to weld the halves of the Bucky ball together amongst the trees. Matching up the vertices of the Buckminsterfullerene Molecule was a difficult task to create the Carbon 60 atom out of metal rebar.

One of Julian's passions is to model molecules with his art sculpture. Inspired by his research in physics of the quantum effects of carbon-60 atoms at high temperatures, he recreates these molecules in his artistic models. Julian worked under renown physicist, Anton Zeilinger who wrote, Dance of the Photons. Julian and Anton did quantum research sending high temperature Bucky Balls through the dual slit experiment in quantum physics.

The carbon-60 atom is an unusually large molecule sometimes found in meteoritical impacts and in the atmospheres of red giant stars. Astronomers observing the spectral/ absorption lines of the interstellar medium within the Milky Way have observed chains of carbon atoms from red giants. The cause of these long carbon molecules was finally found in cool red giant carbon stars. These stars have run out of primary hydrogen fuel and are now "burning" helium atoms. Finally this carbon is then blown into the interstellar space to create chains of carbon molecules.

When the carbon-60 molecule was discovered it looked like a geodesic dome and so the molecule named it after Buckminsterfuller. The discoverer of the molecule called it the "Buckminsterfullerene" or Bucky ball. I have a fond memory of talking to Bucky Fuller (as he was known to all) at University of Portland after a captivating lecture about his career in architecture and the future of humanity. He was a legendary inspirational speaker.

Portland's great Nobel Prize winner, Linus Pauling, also inspires Julian's sculptures of molecule art. In front of the Linus Pauling Complex on 39th & Hawthorne is a red 10-foot tall Alpha Helix Molecule that Julian sculpted and welded into one of the important molecules discovered by Linus Pauling with X-ray spectroscopy. Julian poured a concrete footing and dedicated the Alpha Helix sculpture to Linus Pauling. Anderson Construction used a rubber tire track hoe to lift the 400 Kilogram quantum sculpture into place. The dedication of the Alpha Helix was an exciting event with Pauling's student and benefactor Douglas Strain (president of electro scientific) and Terry Bristol, President of the Institute for Science, Engineering and Public Policy, in charge of the event. It must have been interesting to the passersby as the Alpha Helix was dedicated at the Linus Pauling center on Hawthorne Street. There is a plaque describing the Alpha Helix.

[Carbon Star \(Red giant\)](#)

Julian's talent in physics is reflected his sculptures of molecules and proteins. I had the opportunity to view many of Julian's artistic creations at the North West College or Art, art exhibit. Some of Julian's creations on display were the triple helix, bamboo helix and others.

In a recent trip to Corvallis with Julian, we viewed the Linus Pauling collection of molecules, some of them he studied with X-ray spectroscopy. In the vault at the OSU library are hundred or so molecules that Pauling and his grad students created. There is a model of Pauling's triple helix, the early theorized creation of the DNA molecule.

If you get the chance, take a trip to see one of Julian's quantum sculptures of science. I have enjoyed the complex Alpha Helix sculptures that Julian has created, motivating me to build more esthetic and complex telescopes. Creating quantum art stretches the limits of the imagination, from the world of the quantum to the Carbon 60 molecules of red giant stars.

**Kah-Nee-Ta Messier Marathon Star Party
March 23-25, 2012**

You don't even need a telescope to participate; other members are enthusiastic to share their views. This is a good opportunity for beginners to get acquainted and seasoned observers to get back into the groove. We look forward to seeing you there!

Known for its clear, dark skies this time of year, the Kah-Nee-Ta Resort offers a family retreat atmosphere with many amenities and activities. Come and observe your favorite objects under Central Oregon's clear dark skies, spend a wonderful weekend with other astronomers swapping observing stories and exchanging information, or even just spend a relaxing weekend with your family, all in comfortable accommodations that offer various other activities. RCA Special Hotel Rate is \$78 per room per night, advance reservations highly recommended! Deadline for the special rate is March 2nd.

You must CALL to make your own reservations and be sure to mention that you want the RCA rate. 1-800-554-4786

RCA is NOT responsible for your reservations or your deposit with the resort. No Refunds within 72 hours of your first reserved night.

More information can be found on the RCA website:
<http://www.rosecityastronomers.org/sp/kahneeta.htm>

**Maupin Star Party
April 20-22, 2012**

The Rose City Astronomers have been granted permission to use private property approximately 8 miles West of the town of Maupin for members-only scheduled Star Parties.

The Maupin Observing Site is located on a private airstrip about 8 miles east of Maupin, Oregon. Warning: this airstrip is used in the morning, but at the far end of the airfield. Most people don't even wake up.

There is no registration for the event itself, just show up and enjoy the weekend. You don't even need a telescope to participate; other members are enthusiastic to share their views. This is a good opportunity for beginners to get acquainted and seasoned observers to get some serious observing.

It can always be cold at night no matter what the season, so bring warm clothing.

RVs, trailers and tents will be allowed on the observing site (see observing site map for instructions). The town of Maupin offers lodging, restaurants and recreation if you don't want to rough it. We will have a portable outhouse on site.

More information can be found on the RCA website:
<http://www.rosecityastronomers.org/sp/maupin.htm>



**Camp Hancock
May 18 - May 20, 2012**

OMSI's Camp Hancock with meals and cabins fits the bill for a great outing on a cool Spring weekend. Dark skies, warm cabins, real bathrooms, hot showers, good meals and great friends top off the list of things to like and all are provided with the \$45 per night registration fee (OK, maybe not the friends).

Camp Hancock is an OMSI sponsored field station for the promotion of science education. It is located about 150 miles from Portland and is 2 miles east of the John Day River in Eastern Oregon in the Clarno Fossil Beds. Camp Hancock is NOT a resort hotel; it is a rustic kid's camp with 16 bunkhouses that sleep up to 14 people each in A-frame buildings. The bunkhouses are one room with bunks, mattresses, limited electricity and heaters on a 60 minute timer. You will be sharing the bunkhouse with others in our group, but it's never crowded and we usually average less than 3 people per cabin. There is a limited area for Tents, RVs and trailers.

Registrations will be taken at both the March and April general meetings. For mail in registration forms, or to register and pay online please visit <http://www.rosecityastronomers.org/sp/hancock.htm>. The Registration and Payment Deadline is May 11th for mail in and May 13 for online payments.

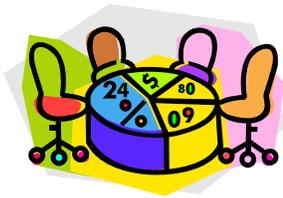
**OMSI - Vernal Equinox Celebration
March 17th, 2012**

Held at [Rooster Rock](#) & [Stub Stewart](#) State Parks. Viewing highlights includes the planets Venus, Jupiter, Mars, deep sky objects including the Orion Nebula, Beehive star cluster and more!

See <http://omsiedu/starparties> for more information or cancellations.

Star Parties Coming Soon!

- Rooster Rock Dark Sky Star Party April 14
- Stub Stewark Dark Sky Star Party April 21
- OMSI Astronomy Day April 28
- OMSI Planet Parade Star Party May 12
- Camp Hancock May 18-20
- Stub Stewark Dark Sky Star Party May 19
- OMSI Partial Solar Eclipse May 20
- OMSI Transit of Venus Jun 05
- Maupin Dark Sky Star Party Weekend Jun 15-17
- Rooster Rock Dark Sky Star Party Jun 16
- SkyView Acres Dark Sky Star Party Jun 22-23



Minutes of the Rose City Astronomers Board

December 5th 2011

Held at OMSI Classroom 1

Chair : Sameer Ruiwale

Secretary : Duncan Kitchin

Chair : Sameer Ruiwale

Secretary : Duncan Kitchin

Board Members Present

Sameer Ruiwale (President)
Mark Martin (VP Programming)
Duncan Kitchin (Secretary)
Larry Froberg (Sales Director)
Howard Knytych (New Member Advisor)
Jan Keiski (Library Director, OMSI & Sister Club Liaison)
Greg Rohde (Telescope Library)
David Nemo (Observing Site Director)
Scott Kindt (Special Interest Groups Director)
Ada Hayes (RCA Youth Director)

Call to Order

The meeting was called to order at 7:07pm by Sameer Ruiwale and, there being 9 board members present, the quorum requirement of 9 was declared to be met.

Approval of Agenda

Moved: Sameer. Second: Duncan. The agenda was approved by unanimous consent.

Approval of Minutes

Moved: Approve minutes from the November 2011 board meeting. Moved: Duncan Kitchin. Second: Sameer Ruiwale. Correction to title of Rod Mollise's book (should include the word "new"). Approved 9-0-0.

Directors' Reports

Secretary's Report – Duncan Kitchin: **Quorum (9)** met with 9 voting members present.

Treasurer's Report – Larry Godsey: Larry not able to attend, but provided financial reports on the website.

VP Programming – Mark Martin: Posted schedule for next year. January speaker is "Uncle" Rod Mollise. Mark has details of the talk which has been posted on the forum. Will be an extension of his earlier talk on "The Past Present and Future of the SCT". February is Richard Berry, who will talk about the first really big telescopes and their impact on discovery of the universe. Peter Ward from the University of Washington is booked for March, but Mark does not have details of the talk available at this time. James Schaumburg from the University of Oregon will be speaking in April about space telescopes. May will be the info fair. June or

July will be Pat Hanrahan's presentation on the Southern Sky. Brother Guy Consolmagno will be speaking in September. Brother Consolmagno is planetary scientist and curator of the meteorite collection at the Vatican Observatory and author of the book "Turn Left at Orion". October's speaker will be Richard Berry, who will be talking about his new book about optics. Still looking for speakers for June or July, August and November. Mark has a number of leads on possible speakers which he is following.

VP Observing – Sameer Ruiwale (pro tem) : Fees at Rooster Rock – Sameer has confirmed that the park will waive fees in connection with our assistance of OMSI public star parties. Has not contacted Stub Stewart state park with respect to RCA star parties, but not expecting any issues.

VP Community Affairs – Dawn Willard: Not present.

VP Membership – Ken Hose: Not present.

Alcor – Ken Hose: Not present.

New Member Advisor – Howard Knytych: There was a new members meeting last month. Attendance down slightly, but still approximately 20 attendees. Next new member meeting will be in January.

Media Director – Diana Fredlund: Not able to attend, but report submitted via Sameer to be discussed under new business.

Sales – Larry Froberg: Sold 44 calendars already out of 125 ordered. Some additional seasonal items also available. Has ordered copies of the new edition of "Turn Left at Orion", which will be available in December. Made a total of \$744 in sales last month. Have 10 pre-orders for Rod Mollise's book.

Book Library – Jan Keiski: Book library sale at the last meeting brought in \$40. Book library will not be open for the next meeting.

Telescope Library – Greg Rohde: No new donations in the past month, but Greg has one to pick up tomorrow. Greg will be bringing about 6 surplus to requirements telescopes to the December meeting to sell. Spoke with one of the Park Rangers at Stub Stewart: they have a 10" Newtonian on an equatorial mount that they need help with. Greg will be bringing it in to the telescope workshop. The Park is considering building a permanent observatory to house it. Noted that we have a surplus 12" LX200 that might be more suitable for their use. Greg will explore whether we might be able to arrange for the Park to use it in place of the 10" Newtonian.

IDA – Dawn Nilson: Not present.

Magazine Subscriptions – Larry Godsey: Not present.

Webmaster – Larry Godsey: Not present.

Site Committee – David Nemo: No updates. Current balance approximately \$20,000.

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(Continued from page 10)

Youth Director – Ada Hayes: Planning to hold first meeting in January. Would like to start at 6:30pm; Sameer will check with Jim Todd to make sure that room is available. Also working on outreach to after school programs, and putting together a consistent plan for meetings. Suggested that it would be a good idea to send information on youth meetings to Diana; we have consistently been getting write ups in the Oregonian.

Newsletter Editor – Scott Kindt: Always looking for more articles; has had a couple of submissions this month.

SIGs – Scott Kindt: Nominal.

OMSI –Jan Keiski: Jim Todd has everything ready for December, including classroom 1 for the youth meeting. Later next year availability of classroom 1 for the youth meeting gets difficult – we might have to look into using the turbine hall or the planetarium.

Sister Club update – Jan Keiski: GAMA recently held their summer barbecue, which is to kick off their summer observing season. Jan has pictures that she will forward to Scott Kindt for inclusion in the newsletter.

Old Business

Proposal for RCA / Clackamas Comm. Coll Haggart Observatory use – David Nemo / Sameer Ruiwale. No updates.

Create guidelines for possible telescope award donations to local schools or other organizations – Greg Rohde. No updates.

Elections: slate was elected unopposed with some vacant positions; VP observing position is still currently vacant for next year.

December Holiday potluck and swap meet
Food and other logistics. Suggestion to order pizzas as additional to whatever people bring. Mark has procured additional plates, plastic knives & forks and a selection of drinks.

Movie start time is currently planned for 8pm.

New Business

Beth Deal donations to the club. Peter Abrahams has been talking to Beth Deal. Various options: sell the items, donate to another club or a school, or possibly donate to GAMA. There are a number of high value eyepieces and an SCT. Very important to make sure that it goes to somebody who will appreciate it. Carlos and Leo will be visiting from GAMA and may be able to take it back with them.

Galileo Award nominees discussion. Motion to approve passes 8-1-1.

Adjournment

There being no further business, the meeting was adjourned at 8:56pm



Astronomical League Awards



Congratulations to the following Rose City Astronomers members:

Henry Peterson
Lunar Program Award #744



Patrick L. Hanrahan
Southern Sky Telescopic Program Award #35



Carolyn Nissen
Messier Program Award #2564



Mark Martin
Binocular Messier Program Award #920
Messier Program Award #2522



Howard Knytych
Local Galaxy Group Program Award #14-M



2012 AT A GLANCE

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2012 Calendar by RCA Members On Sale at the General Meetings

The calendar is 17 inches high by 11 inches wide
It contains all of the planned RCA meetings,
SIG meetings and RCA outings.

Cost will be \$10 again this year.

FEBRUARY 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3 Noon Downtowners Luncheon Kell's	4
5	6 7pm Board Meeting OMSI Classroom 1 	7	8	9	10	11 10am - 3pm Telescope Workshop
12	13 7pm Astro Imaging SIG Beaverton Library 	14	15	16	17	18
19	20 6:30pm  Junior Astronomers and New Members 7:30pm General Meeting OMSI Auditorium	21	22 7pm Cosmology SIG	23	24	25
26	27 	28	29			

March 2012

Mar 02	Friday	Downtowners Luncheon	Kell's	Noon
Mar 03	Saturday	Telescope Workshop	Swan Island	10am-3pm
Mar 05	Monday	Board Meeting	OMSI Classroom 2	7pm
Mar 12	Monday	Astro-Imaging SIG	Beaverton Public Library	7pm
Mar 17	Saturday	OSMI Star Party	Rooster Rock and Stub Stewart	Sunset
Mar 19	Monday	General Meeting	OMSI Auditorium	7:30pm
Mar 23-25	Fri-Sun	Kah-nee-ta Star Party	Kah-nee-ta Resort	
Mar 21	Wednesday	Cosmology SIG	Linus Pauling House	7pm

<http://www.rosecityastronomers.org>

Rose City Astronomers
Oregon Museum of Science and Industry
1945 SE Water Ave
Portland, OR 97214-3356