Monthly Newsletter of the Kern Astronomical Society

Number 454 **September 2011**

The Kern Astronomical Society (K.A.S.) promotes community awareness of current events in astronomy, and provides a forum for sharing of knowledge and experiences among amateur astronomers. The Kern Astronomical Society normally meets at 6:30 PM on the first Friday of each month at Cataldo's 4200 Stine Road. Annual membership is $20.00. With membership Sky and Telescope and / or Astronomy magazines are available at reduced rates. More information can be found on our web site: http://www.kernastro.org/

Kern Astronomical Society will e-mail The SYZYGY free of charge to any teacher. Just send your E-mail address to tcdellacqua@att.net

K. A. S. Board Members:

President: Rod Guice (720-217-5701)

Vice President: Diane Franco (679-7097)

Secretary: Cathy Jones (319-4424)

Treasurer: Cathy Collett (477-9325)

Equipment: Steve Collett (477-9325)

SYZYGY: Tony Dell'Acqua (205-4355)

Star Parties: David Davenport (873-3483).

Meeting: Friday September 2nd @ 6 pm Food & Fellowship, 7pm Buisness meeting.
Location: Cataldo's 4200 Stine Road.
Presentation: "Looking for M51" Doug Stewart

Club Star Parties:

The Kern Astronomical Society usually has 2 Club-Star Parties per month depending on the weather. We also host public Star parties upon request. Our Star Parties are held on Saturdays. The primary date is the weekend of new moon. The secondary weekend is before or after new moon. Locations for Star Parties are decided at our monthly meeting. You may get current Star Party information from our coordinator:

David Davenport (654-8564) dwdavenprt@aol.com

Club Star Parties
See Attached Calendar

K. A. S. Club Telescopes

The Kern Astronomical Society offers five telescopes, to club members in good standing, for monthly check out. Below is a description of the KAS telescopes, the member who currently has it in their possession, and when it is due to return. Anyone wishing to check out a club telescope should contact Steve at 477-9325 or via email at starmstr1@bak.rr.com

6" f/6	Out to Robert Moreno
8" f/6	Out to Diane Franco
10"f/5.6	Available
13" f/4.5	Available

Presidents Preview

Club Reminders

KAS membership dues are renewed at the September meeting. The "Yearly Family Membership" is $20.00, Sky & Tel magazine is $33.00 and Astronomy Magazine is $34.00. We also have PATS tickets for sale at $10.00 each.

Those who can't make it to the meeting should mail their checks to me at:

Cathy Collett
6021 Shandon Lane
Bakersfield, CA 93306

Please make the checks payable to KAS.

You may send articles, pictures, stories, etc to the SYZYGY editor any time of the month before the next Newsletter. I will make sure your contribution is recognized .

Tony

Interesting internet sites

KAS on Facebook
http://www.facebook.com/frankripepi

Mcdonald observatory's Channelhttp://www.youtube.com/mcdonaldobservatory

Dear Fellow Bits of Star Stuff Come to Consciousness:
Did you know that the KAS was first registered with the California Secretary of State on January 5, 1956? I was one year old at the time, and many of you weren't born yet! The Business Entity Report, from the Secretary of State's website, is included in this Syzygy for your reference. We've been around for almost Geologic time!

Accordingly, I would like to most cordially welcome you back for the Official 56th Fall season of the KAS! I sincerely hope your summer experiences and vacations were absolutely astronomical! I especially want to invite each of you to join us at the coming September 2nd meeting at Cataldo's. There is much to discuss. Here's a preview:

- A draft Star Party Letter of Understanding has been adopted by the Board. We've included it in this Syzygy for your review. Your comments are invited!
- We are researching a possible need to re-start our insurance coverage, in particular for Star Parties. In order for the coverage to be binding, it may be necessary for us to update our Registration with the Secretary of State's office. We want to update you on our thinking and what we think we've learned, and hear your comments.
- We are developing a new set of By-Laws for the KAS. We want to tell you why we think this is needed, and hear your comments (we will not vote on this Friday).
- We will recommend a budget for, and the purchase of, some audio-visual equipment.
- It's past time that we took another Road Trip! Where would you like to go?
    - Goldstone Deep Space Communications Complex?
    - Palomar Observatory (Cal Tech)?
    - The Allen Telescope Array (UC Berkeley, SETI)
    - The Big Bear Solar Observatory? (Cal Tech)?
    - The Owens Valley Radio Observatory (Blazars)
    - The Nevada Test Site? Area 51?
    - Star Gazing atop Hoover Dam? Anything (within reason) is possible!
    - Let us go forth and expose ourselves to new and exotic faces and places!
- It's time to renew KAS Memberships and Subscriptions to Astronomy Magazine (so bring your checkbooks, or cash)
- It's also time for the Election of Officers: The current Officers are willing to serve again (they've apparently learned nothing and may have mental limitations), with your approval of course.

Presentations at this meeting will include:

- "Star Brightness and the Winter Hexagon," for our younger members, by yours truly. The Club has long discussed ideas to get more young people involved in the KAS- we agree and are starting this effort with a presentation targeting their level; so, we encourage you to bring your kids, and their friends! There will also be some items that target younger audiences (and the young at heart) during fellowship time!
- "The Grail Mission" – Diane Franco will review this upcoming project during Current Events
- "Searching for M51," our Keynote presentation, by Member Emeritus Doug Stewart, just back from his tour of the Confederation of Former Soviet Independent States!

Happy Fall Season! Hope to see you all at Cataldo's! Remember, ordering ahead will enhance your fellowship time!

Clear skies, fair winds, and bright stars to you all!

Rod

KAS EVENTS

ANNUAL KAS EVENTS FOR 2011/2012

2011

SEPTEMBER 17 & 18 – PATS IN PASADENA

DECEMBER 2ND POTLUCK DINNER

2012

APRIL 14 - FOOTHILL HIGH SCHOOL ASTRONOMY DAY

MAY - JPL OPEN HOUSE
MAY – RTMC (RIVESIDE TELESCOPE MAKERS CONFERENCE)
MAY 20 – TRIP TO REDDING FOR SOLAR ECLISPE

DATES TO BE DETERMINED 2012

ANNUAL PICNIC
ROAD TRIP - CAMPING TRIP ? OBSERVATORY?
PATS
RUSSO' BOOKS
POTLUCK DINNER

Fall 2011 Planetarium evening show schedule

* September 22nd - Ice worlds 7:30 – 8:30pm

* October 20th – Dawn of the space age. 7:30 – 8:45pm (note longer show)

* November 17th - Black holes: The other side of infinity. 7:30 – 8:30pm

* December 1st & 8th – Season of light. 7:30 -8:45pm (note longer show)

Details about all of the shows and where to get tickets are available on the Planetarium's website at www.bakersfieldcollege.edu/planetarium
--
Nick Strobel

KAS Club Business

Introducing the KAS Star Party Policy, Letter of Understanding, and a Request for Event Leaders!

The KAS recently started using a "Star Party Letter of Understanding" in order to better schedule, organize, and support star parties we do with community organizations. These organizations include elementary, middle, and high schools (public & private), scout troops, a library, and the Sierra Club. The Letter is included in this issue of the Syzygy.

Here's how the process should work: When a community organization contacts the KAS Star Party Coordinator, their requested date is "penciled-in." The Star Party Coordinator then sends an e-mail to KAS members who have expressed interest in leading such an event. When one person accepts the lead on the event, the Star Party Coordinator contacts the community organization to finalize the event. If no one accepts "the lead," the proposed event is canceled.

Are you interested in being the lead for one (or more) events this year? If so, please contact David Davenport, Star Party Coordinator (dwdavenprt@aol.com). He will put you on the "distribution list" for volunteer leaders for school and organization Star Parties. Acceptance of an event is entirely voluntary. You can volunteer for one event, or many, as you prefer. The Star Party Coordinator will NOT "pressure" anyone into volunteering for any particular event . . . we just cancel any proposed event that has no leader-interest.

The "KAS event leader" is now called the "Sky Guide." **What does the "Sky Guide" do to support/lead an event?**

- Volunteers to lead a specific event.
- Accepts e-mails and phone calls from KAS members who intend to attend the event. (They learned about it from an all-KAS e-mail from the Star Party Coordinator).
- Keeps cell phone numbers (or other contact info) of the "intendees," so the Sky Guide can contact them ASAP if the event is canceled due to weather.
- Contacts the host leader, to discuss any special needs, exact location of set-up, arrival time, departure time, etc.
- Re-confirms with the host leader, the day before, or the day of the event, to verify all is "go." If the host organization has requested an "indoor astronomy event" in the event of bad weather, the Sky Guide checks with the "intendees" and KAS officers, to verify "indoor" resources, when the forecast justifies "back-up plans."
- Arrives early at the site, to make contact with the host leader, and set up.
- Directs arriving KAS members to the telescope set-up area.
- Acts as the "in-charge" KAS person at the event, in place of any KAS officer.
- Chats with the host leader during and/or after the event, to asses how it went.

If this interests you—just once a year—please contact David Davenport to be on the "Sky Guide distribution list." Leading a Star Party is a wonderful experience! I highly recommend it!

Thanks for your consideration!

Rod

Letter of Understanding for a "Star Party" Event
Between:

KAS:	Kern Astronomical Society			**Name of Sponsoring Organization:**	
URL:	www.kernastro.org			**Street Address**	
				City, State, Zip	
Name of "Star Party Coordinator" (does all KAS scheduling):	David Davenport		***AND***	**Name of Primary Contact Person** (for school, usually a teacher):	
Cell Phone:	661-873-3483			**Cell Phone:**	
E-mail	dwdavenprt@aol.com			**E-mail**	
Name of "Sky Guide" (on-site, lead KAS astronomer)**:**				**Name of Secondary Contact Person** (for a school, usually the Principal):	
Cell Phone:				**Cell Phone:**	
E-mail:				**E-mail**	

Date KAS was contacted: _____

Proposed Date of the Star Party Event: _____ Time: _____

Proposed Date □ Confirmed or
□ Canceled by KAS "Star Party Coordinator" on: _____

(When a date has been confirmed by the KAS "Star Party Coordinator," the KAS "Sky Guide" then takes over all communications with the Sponsoring Organization).

Options: If the weather is too cloudy to view astronomy objects, our sponsoring organization would like to (check-off ONE):

- □ A. Keep the original date, and move the event into an on-site gymnasium, cafeteria, or multi-purpose room. Activities may include: "show and tell" on how telescopes work; astronomy book table; astronomy DVD; astronomy Power Point presentation; astronomy crafts, etc. The Sponsoring Organization will provide a microphone, tables, PowerPoint projectors, extension cords, and screens and for use by KAS—if available .
- □ B. Postpone the event to a date later in the same year (if "open dates" are available).
- □ C. Postpone until the next year.

Pointers and Notices for Sponsoring Organizations

1. Advance Notice: Two-weeks is considered "minimum notice." More advance time is preferable for all concerned. Some schools choose "next year's date" a year in advance.
2. Duration & Frequency: A Star Party event is generally 1.5 (or more) hours long. Events are limited to one per organization, per year ("school year" for schools).
3. Time of Day: **Night-time Star Parties** usually begin at the "end of civil twilight" (first darkness), or 6:30 PM (whichever comes last). They generally continue 1.5 to 3 hours. See page 3 for a table that shows "end of civil twilight" for each day of the year.

   Daytime Star Parties are also scheduled, using solar telescopes to safely observe our Sun, its sun spots, solar flares and prominences. These can be morning or afternoon hours.
4. Speakers: are available for day-time or night-time classes and meeting events; with or without a Star Party. If possible, please make available your own Power Point projector, and screen.
5. Day of Week: Star Parties may be scheduled any day of the week.
6. Day of Month: KAS highly recommends scheduling your night-time Star Party event when the Moon is visible. (Its craters and mountains are great "beginner" objects!). The Moon is visible for night Star Parties only 15 days each month. Please refer to the table on page 3 for nights with a Moon.

7. Time of the Year: School events get first priority from September 1 to April 30. (Note: December to February nights are cold, and not so popular). Non-school organizations (scouts, youth groups, etc.) that meet on an "all-year-round" basis get first priority from May 1 to August 31.
8. Site selection: The darker the location, the better for astronomy viewing. For schools, this is often an asphalt playground, or grassy field behind the school. If possible, select a location where the view of the sky is wide and unobstructed, and exterior lighting is minimized or blocked.
9. Facilities/Restrooms: If possible, arrange with the grounds staff to **turn-off security lighting** in that area, and **turn-off any night-time irrigation sprinklers**. Arrange to **have restrooms open**.
10. Simultaneous Events: Some schools wish to host a Star Party the same night as a school Open House, Science Night, Library Night, or other school function. Please keep in-mind that only *half the days of the month* have a night-time Moon. We highly recommend those nights! See the table on page 3.
11. Fund Raisers: Some schools generate additional interest in the Star Party event by having the PTA sell food and beverages before (or during) the Star Party event (hot coffee, cocoa, BBQ dinner plates; pizza slices, sodas, etc.). Some schools sell the chemical glo-light necklaces and wristbands. If your school decides to do this, keep in mind an "alternate plan" for the foodstuffs and merchandise, if the night of the event is clouded-over. You may decide to choose "Option A" (page 1) for this reason. If you choose "Option B" (page 1), KAS may or may not be able to schedule a "make-up" date that suits the shelf-life of any food purchased for the event.
12. Volunteer Basis of the Star Party Event: KAS is an "all volunteer" organization. KAS can not promise a certain number of telescopes for clear nights, nor a certain number of "indoor activities" for cloudy nights (Option A, page 1). KAS members who participate in your event do so of their own interest, availability, and financial expense. KAS will make good-faith efforts to provide resources for a worthwhile event. For this reason, the Star Party Organizer will "pencil-in" your proposed date for the first several days. When volunteer resources have been tallied, the Star Party Organizer will contact you to confirm (or cancel) the date.
13. The KAS is a volunteer organization. Costs are incurred from time to time, however, to maintain equipment. Donations from Sponsoring Organizations are never required for any Star Party event, but are most welcome, in any amount. Donations help to keep Star Parties free to the public, aid in the development of new programs, and provide equipment used at the Star Party events.

I have read and understood the above information pertaining to a Star Party event hosted by our Sponsoring Organization. One of the three "Options" on page 1 has been check-marked.

_____ _____ _____ _____

Signature of Primary Contact Person Date Signature of Secondary Contact Person Date

When completed, please scan pages 1 & 2, and e-mail to the "Star Party Coordinator" AND the "Star Guide."

See page 1, top left corner for the two e-mail addresses.

See pages 3 & 4 for tables on "Rise and Set of the Moon"
(**marked dates are recommended— they have a visible Star Party Moon**)

Also see pages 3 & 4 for tables on "Civil Twilight"
"End Civil Twilight" = **earliest time a night-time Star Party can start . . . or 6:30 PM (whichever is later).**

All times are shown in 24-hour "military time"
0000 = Midnight 0900 = 9:00 AM 1200 = Noon 2100 = 9:00 PM

KAS STAR PARTY REPORTS

Lockwood Valley site, August 23rd, Doug Stewart and I set up just before sun down and got ready for a night of viewing. Doug had just that morning received his new 13 mm Ethos eye piece and we were ready to have a look thru it in his 16", F4 Dob. The comet Garradd was one of the first things that we looked at and it just got better as the night got darker, we looked at all of the standard objects for the night. I had a thought as we started observing as to how many Messier objects I could see at this time of the year and set about looking at these. Total number was 60 which included 24 globular clusters, 4 nebula areas, 14 open clusters, 1 star cloud, 3 planetary nebulas, 14 galaxies. If I had planned this a bit better I am sue that I could have added another 10 objects to the total. We packed up and left a bit early, but it was a good night for both of us.

Jim Wood

From the Bakersfield backyard of Karen & Jim Wood here is a black & white picture of Comet Garradd taken on August 24th, picture is a stack of 20 second exposures over a time period of 20 minutes. The comet moved a good ways in that time. Note the lack of a tail, likely the light pollution of Bakersfield took that away.

Jim Wood

NASA launches for 2011

Date: Sept. 8
Mission: GRAIL
Launch Vehicle: Delta II Heavy
Launch Site: Cape Canaveral Air Force Station, Fla.
Launch Pad: Space Launch Complex 17B
Launch Times: 8:37:06 a.m. and 9:16:12 a.m. EDT
Description: The Gravity Recovery and Interior Laboratory mission's primary science objectives will be to determine the structure of the lunar interior from crust to core and to advance understanding of the thermal evolution of the moon.

Date: Oct. 25
Mission: NPP
Launch Vehicle: Delta II
Launch Site: Vandenberg Air Force Base, Calif.
Launch Pad: Space Launch Complex 2W
Launch Window: 2:48:01 a.m. - 2:57:11 a.m. PDT / 5:48:01 a.m. - 5:57:11 a.m. EDT
Description: The National Polar-orbiting Operational Environmental Satellite System Preparatory Project (NPP) mission for NASA and NOAA is to measure Earth's atmospheric and sea surface temperatures, humidity sounding, land and ocean biological activity and cloud and aerosol properties.

Date: Nov. 25 *
Mission: Mars Science Laboratory, Curiosity Rover
Launch Vehicle: Atlas V
Launch Site: Cape Canaveral Air Force Station, Fla.
Launch Pad: Space Launch Complex 41
Launch Time: 10:21 a.m. EST
Description: The Mars Science Laboratory is a rover that will assess whether Mars ever was, or is still today, an environment able to support microbial life and to determine the planet's habitability.

Date: Nov. 30 *
Mission: SpaceX
Launch Vehicle: Falcon 9/Dragon
Launch Site: Cape Canaveral Air Force Station, Fla.
Launch Pad: Space Launch Complex 40
Description: NASA is working with SpaceX to combine its last two demonstration flights. If approved, the Falcon 9 rocket would launch the Dragon capsule to the International Space Station for a docking.

Cleaning your mirror

The series of photos below show the process for cleaning a mirror in the mirror cell. The process is fairly straight forward. The list of supplies is small and should be available at your local grocery store or Drug store.

The list includes:

- one gallon of distilled water **with a drop of dish soap** added for washing the mirror
- one gallon of distilled water for rinsing
- a roll of clean cotton batting
- paper towels
- three small wooden blocks (or similar).

1. Begin by clearing some space near your telescope and setting the small wooden blocks out to support the mirror box. You will be washing and rinsing the mirror in its cell so make sure there is ample drainage in the area. Note: if you have Argo Navis or Servo-Cat installed on your scope disconnect the Alt drive cable and Alt encoder before lifting the mirror box out of the rocker box.

2. Remove the mirror box from the rocker box section and place it on the small blocks. Try and make sure the mirror cell is level.

3. Pour the distilled water and dish soap (2-3 drops per gal. is their concentration per their Book) solution onto the mirror. Pour enough to fill the mirror with the solution.

4. Let the mirror soak in the solution for a few minutes.

5. Take a small section of cotton from the roll. Gently swish the solution around with the cotton batting. DO NOT SCRUB! Tilt the mirror cell so the remaining solution runs off of the mirrors surface. Repeat steps 3, 4 and 5.

6. Rinse the mirror with distilled water.

7. Drain off any remaining distilled water.

8. Gently lay paper towels onto the mirrors surface.

9. Lightly pat the paper towels to help absorb any remaining water and gently remove the paper towel trying not to drag it across the surface. Let the mirror box dry if needed and reinstall it in to the rocker box section.

1.

2.

3.

4.

5.

6.

7.

8.

9.

What IS "Syzygy," Anyway?

Many new (and not-so-new) members are unfamiliar with the *term* that is the title of the KAS monthly newsletter. Below is an excerpt from *Norton's Star Atlas and Reference Handbook* (Ridpath, Ian. 2004. Penguin Group/Dutton & Pearson Education Group. Pages 66-67). It offers a clear explanation *and* diagram of this term, along with the related words: *opposition*, *conjunction* and *quadrature*.

(Submitted by David Davenport, Star Party Coordinator)

ASPECTS OF THE PLANETS As seen from the Earth, the planets reach certain positions relative to the Sun that are known as *aspects*. For the superior planets, the two most significant aspects are opposition and conjunction (Figure 22).

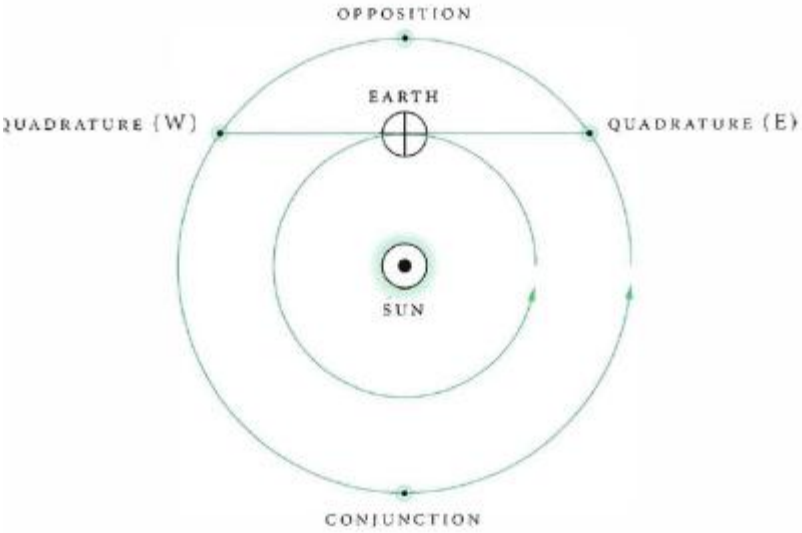

FIGURE 22. *Aspects of the orbit of a superior planet.*

At *opposition* a planet is opposite the Sun in the sky, i.e. its celestial longitude and the Sun's differ by 180°. At opposition a planet is visible all night, and lies on the meridian at midnight. Opposition is the best time to observe the superior planets, since they are then at their closest to the Earth. As seen through a telescope, the apparent size of a planet which has a markedly elliptical orbit, such as Mars, varies considerably depending on whether opposition occurs near the time of the planet's perihelion or aphelion. Perihelic oppositions of Mars are the best times for observation, although the planet may then be low in the sky for northern observers.

At *conjunction*, a planet has the same celestial longitude as the Sun and so lies on the far side of the Sun as seen from the Earth. The planet is then obscured by the Sun's glare. When a planet or the Moon is in line with the Sun, at either opposition or conjunction, it is said to be at *syzygy*; the Moon at syzygy is either new or full.

An additional, less important aspect of the superior planets is

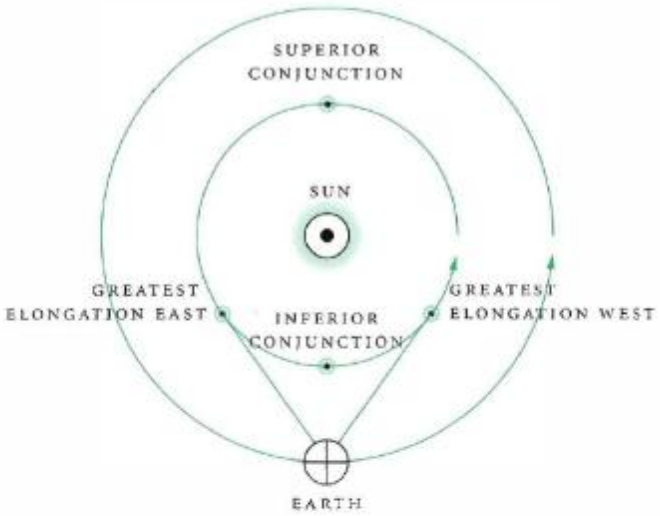

FIGURE 23. *Aspects of the orbit of an inferior planet.*

quadrature, when the angle between the planet and the Sun is 90°. At quadrature the superior planets can show a slight phase effect; the phase is most noticeable for Mars, which appears distinctly gibbous around this time.

The inferior planets, Mercury and Venus, cannot come to opposition or quadrature, but they have two types of conjunction: *inferior conjunction*, when they lie between the Earth and the Sun, and *superior conjunction*, when they lie on the far side of the Sun (Figure 23). The widest angular separation of Mercury and Venus from the Sun is known as *greatest elongation*: either greatest elongation west (in the morning sky) or greatest elongation east (in the evening sky).

An easy "take-home" understanding of "syzygy": The Moon is "at *syzygy*" with the Earth and Sun at "full Moon" and "new Moon"—because all three are connected by a straight line at these two times of the month. DD 2011-08-27

PACIFIC ASTRONOMY

PATS

AND TELESCOPE SHOW

RICHARD ELLIS,
Cosmologist

BRIAN WARNER,
Society for Astronomical Sciences

EMILY LAKDAWALLA,
Society for Planetary Sciences

WARREN KELLER,
AstroImager

TONY FLANDERS,
Sky and Tel

WOLFGANG PROMPER,
AstroImager

MARNI BERENDSEN,
Astronomical Society of the Pacific

MICHAEL BAKICH,
Astronomy Magazine

JOHN DOBSON
Sidewalk Astronomer

THE LARGEST ASTRONOMY AND TELESCOPE SHOW ON THE WEST COAST

* **Two days of Astro Presentations**
* **Vendors and Astro Organizations**
* **Old-town Pasadena**

September 17-18, 2011

Saturday 9:00-5:00, Sunday 9:00-3:00

Pasadena Convention Center
300 E. Green Street, Pasadena, California

Adult—$20 per day, Student—$5 per day, 16 and under, with adult—Free
Happy Hour (Half Price) Saturday after 3:00, Sunday after 1:00
Early purchase/weekend pass discounts
Ticketmaster locations, Ticketmaster.com (searchbox= PATS)
Pasadena Convention Center Box Office—Or for **Discount** tickets see

Riverside Astronomical Society — **Los Angeles Astronomical Society**
Pomona Valley Amateur Astronomers — **Antelope Valley Astronomical Society**
High Desert Astronomical Society — **Western Amateur Astronomers**
Ventura County Astronomical Society — **Orange County Astronomers**

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www.mtwilson.edu/PATS.php

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2011 & 2012 KAS Club & School or Book Store Star Party Calendar

by David Davenport, KAS Star Party Coordinator, 2011-08-27 version

Here is a schedule of club-hosted (gray-shaded) and School/Organization/Book Store-hosted (no- shaded) events for the next several months!

For updates or changes, contact D. Davenport at 661-873-3483 (cell) or dwdavenprt@aol.com.

Star Party Calendar 2011 & 2012.

Kern Astronomical Society (www.kernastro.org)

Date & "Sky Guide" (event leader)	Location	Set-up Time & End Civil Twilight (ECT)	Celestial Observing Time	Notes	KAS Members Intending to Participate
Fr., Sep. 09, 2011 Darren Bly Phone: 661-302-1607	La Viña Middle School 1331 Browning Rd. Delano, CA 93215 (661) 721-3601	6:45 PM ECT: 7:38 PM	7:38 to 9:15 PM	Kaley Hawkins, 8th Grade Science Teacher, is the host. ***KHawkins@duesd.org***. Cell Phone: (661) 303-2518; School Number: (661) 721-3601 First-time event at this School. Based on similar events, 150 to 300 people are predicted.	
Sa., Sep. 10, 2011 To be Determined	Russo's Books The Marketplace Mall (near NW end) 9000 Ming Avenue Bakersfield, CA 93311	7:45 PM ECT: 7:36 PM	7:36 PM to 9:45 PM	Tony Russo, owner, is the host. Phone: (661) 665-4686; russosbooks@bak.rr.com. Generally, 100+ people stop by while browsing the stores and restaurants.	
Sa. Sep. 17, 2011 Rod Guice Cell: 720-217-5701	The Sierra Club 335 Lakewood Drive (Cuddy Hall) Frazier Park, CA 93225	11:15 AM ECT: 7:26 PM	Noon to 3:00 PM (Note: also 1st day of PATS conf.)	This is a SOLAR TELESCOPE and "astronomy info/education booth" event. Part of Sierra Club's annual "Nature Fest." Need 2+ solar telescope operators, and 2+ KAS people for giving the "Sky-Q" quiz and other "table activities."	Diane Franco
Sa., Sep. 24, 2011 To be Determined	Lockwood Valley Ranger Station, OR Wind Wolves Nature Preserve	6:30 PM ECT: 7:15 PM	ECT: 7:15 PM until ???	No Contact info. This is a National Forest Service (NFS) location. Bring WARM clothes in ALL seasons for this 5,400 feet elevation. Very cold after sunset.	
Sa., Oct. 01, 2011 To be Determined	Lockwood Valley Ranger Station, OR Wind Wolves Nature Preserve	7:00 PM ECT: 7:05 PM	ECT: 7:05 PM until ???	No Contact info. This is a National Forest Service (NFS) location. Bring WARM clothes in ALL seasons for this 5,400 feet elevation. Very cold after sunset.	
Sa., Oct. 8, 2011 David Davenport Cell: 873-3483	Kern County Library, Frazier Park Branch 3015 Mount Pinos Way Frazier Park, CA 93225	4:45 PM ECT: 6:56 PM	5:30 to 8:30 PM	KAS is doing a "Moon Viewing" event as part of an all-day "Moon Day" with the NEW library branch (opening THAT week in F. P.); which has a day-grant from NASA's Lunar and Planetary Institute. Moon rises at 5:06 PM.	Grant Davenport

Sa., Oct. 8, 2011 To be Determined	Russo's Books The Marketplace Mall (near NW end) 9000 Ming Avenue Bakersfield, CA 93311	6:15 PM ECT: 6:56 PM	6:56 PM to 9:45 PM	Tony Russo, owner, is the host. Phone: (661) 665-4686; russosbooks@bak.rr.com. Generally, 100+ people stop by while browsing the stores and restaurants.	
Date & "Sky Guide" (event leader)	**Location**	**Set-up Time & End Civil Twilight (ECT)**	**Celestial Observing Time**	**Notes**	**KAS Members Intending to Participate**
Sa., Oct. 22, 2011 To be Determined	Wind Wolves Nature Preserve, 16019 Hwy. 166, Bakersfield, CA 93313. Near Maricopa, CA	5:45 PM ECT: 6:38 PM	ECT: 6:38 PM	Sherryl Clendenen is the contact administrator; sherryl.c@twc-ca.org, office phone 661-858-1115. Web: http://www.wildlandsconservancy.org	
Sa., Oct. 29, 2011 To be Determined	Wind Wolves Nature Preserve, 16019 Hwy. 166, Bakersfield, CA 93313. Near Maricopa, CA	5:45 PM ECT: 6:31 PM	ECT: 6:31 PM	Sherryl Clendenen is the contact administrator; sherryl.c@twc-ca.org, office phone 661-858-1115. Web: http://www.wildlandsconservancy.org	
Su., Nov. 06, 2011	**Pacific Standard Time** resumes at 02:00 AM. Move clocks to one-hour *earlier* ("Fall back").				
Tu., Nov. 08, 2011 Gregg Pytlak	Del Rio Elementary School 600 Hidalgo Drive Bakersfield, CA 93314	5:45 PM (set-up under dark) ECT: 5:22 PM	6:30 to 8:00 PM. (KAS must be "off-property" before 8:30 PM)	Judy Wagner, 3rd Grade Teacher, is the host: jwagner@ruesd.net; cell phone 205-4659; school ***588-6050. Third time at this school; expect 200+ people.*** ***Jupiter and Moon prominent, with Great Square of Pegasus overhead.***	
Sa., Nov. 12, 2011 To be Determined	Russo's Books The Marketplace Mall (near NW end) 9000 Ming Avenue Bakersfield, CA 93311	6:15 PM (set-up under mall lighting) ECT: 5:19 PM	7:00 PM to 9:45 PM	Tony Russo, owner, is the host. Phone: (661) 665-4686; russosbooks@bak.rr.com. Generally, 100+ people stop by while browsing the stores and restaurants.	
Sa., Nov. 19, 2011 To be Determined	Wind Wolves Nature Preserve, 16019 Hwy. 166, Bakersfield, CA 93313. Near Maricopa, CA	4:40 PM ECT: 5:14 PM	ECT: 5:14 PM	Sherryl Clendenen is the contact administrator; sherryl.c@twc-ca.org, office phone 661-858-1115. Web: http://www.wildlandsconservancy.org	
Sa., Nov. 26, 2011 To be Determined	Wind Wolves Nature Preserve, 16019 Hwy. 166, Bakersfield, CA 93313. Near Maricopa, CA	4:40 PM ECT: 5:12 PM	ECT: 5:12 PM	Sherryl Clendenen is the contact administrator; sherryl.c@twc-ca.org, office phone 661-858-1115. Web: http://www.wildlandsconservancy.org	
Sa., Dec. 17, 2011 To be Determined	Wind Wolves Nature Preserve, 16019 Hwy. 166, Bakersfield, CA 93313. Near Maricopa, CA	4:40 PM ECT: 5:14 PM	ECT: 5:14 PM	Sherryl Clendenen is the contact administrator; sherryl.c@twc-ca.org, office phone 661-858-1115. Web: http://www.wildlandsconservancy.org	

Sa., Dec. 24, 2011 To be Determined	Wind Wolves Nature Preserve, 16019 Hwy. 166, Bakersfield, CA 93313. Near Maricopa, CA	4:40 PM ECT: 5:17 PM	ECT: 5:17 PM	Sherryl Clendenen is the contact administrator; sherryl.c@twc-ca.org, office phone 661-858-1115. Web: http://www.wildlandsconservancy.org	Anyone planning to attend? This is Christmas Eve.
Sa., Jan. 21, 2011 To be Determined	Wind Wolves Nature Preserve, 16019 Hwy. 166, Bakersfield, CA 93313. Near Maricopa, CA	5:05 PM ECT: 5:40 PM	ECT: 5:40 PM	Sherryl Clendenen is the contact administrator; sherryl.c@twc-ca.org, office phone 661-858-1115. Web: http://www.wildlandsconservancy.org	
Sa., Jan. 28, 2011 To be Determined	Wind Wolves Nature Preserve, 16019 Hwy. 166, Bakersfield, CA 93313. Near Maricopa, CA	5:10 PM ECT: 5:47 PM	ECT: 5:47 PM	Sherryl Clendenen is the contact administrator; sherryl.c@twc-ca.org, office phone 661-858-1115. Web: http://www.wildlandsconservancy.org	
Date & "Sky Guide" (event leader)	**Location**	**Set-up Time & End Civil Twilight (ECT)**	**Celestial Observing Time**	**Notes**	**KAS Members Intending to Participate**
Sa., Feb. 19, 2011 To be Determined	Wind Wolves Nature Preserve, 16019 Hwy. 166, Bakersfield, CA 93313. Near Maricopa, CA	5:30 PM ECT: 6:08 PM	ECT: 6:08 PM	Sherryl Clendenen is the contact administrator; sherryl.c@twc-ca.org, office phone 661-858-1115. Web: http://www.wildlandsconservancy.org	
Th., Feb.23, 2012 Rod Guice	Brownie Troop # 376 (Girl Scouts of America) Norris Elementary School 7110 Old Farm Road Bakersfield, CA 93312	05:35 ECT: 6:11 PM	6:00 to 7:30 P.M.	Troop co-leader is Ms. Kristy Greene, phone: 699-6790; e-mail: troop376@mail.com. First-time event. KAS speaker will address Brownie patch "Space" topics, indoors. Then sky viewing, outdoors. Will alternate indoor/outdoor, based on temperature. 10 girls, ages 7 to 8 (Grades 2 & 3).	Speaker: Rod Guice. Cathy Jones, Diane Franco on telescopes
Sa., Feb. 26, 2011 To be Determined	Wind Wolves Nature Preserve, 16019 Hwy. 166, Bakersfield, CA 93313. Near Maricopa, CA	5:30 PM ECT: 6:14 PM	ECT: 6:14 PM	Sherryl Clendenen is the contact administrator; sherryl.c@twc-ca.org, office phone 661-858-1115. Web: http://www.wildlandsconservancy.org	
END					

For Sale: Tele Vue, Nagler, 12.0mm Type 4 eyepiece $150. The current price listed the Orion catalog is $340 (not including tax or shipping.....).

It will go for sale on "Astromart" Sep. 6th.

Doug Stewart 665-0155