



## President's Message

*By Patrick Donnelly*

It is now September, and that means that the gala 20<sup>th</sup> anniversary Party for the FPOA has past. It was a great time. Everyone ate well, and our raffle was the biggest ever. Our speaker was Joseph Hennawi from Berkeley, who gave a very interesting talk on cosmology and using a Gravitational Lens to determine the mass of Dark Matter in the lensing galaxy cluster. This mass determination can be done, in spite of the fact that we have no idea what Dark Matter is. The FPOA also received two- (2) awards. The first was from the Department of Parks and Recreation for 20 years of service. The second was from Assemblyman Simon Salinas for our public outreach efforts. This is the second award of this type that the FPOA has received.

I guess my column is as good as any place to express my opinion on the Pluto debate. My initial reaction was one of puzzlement, since Pluto has been a planet ever since I first picked up an astronomy book 52 years ago. However, as I found out about 15 years ago, Ceres was also designated as a planet for over 40 years before it was reclassified as an asteroid. Based upon this previous action, precedent would allow Pluto to be reclassified. It's not like Pluto will lose the name planet in its entirety. Now it is a "Dwarf Planet" along with Ceres, Charon, and Xena. This new classification leaves the other eight planets to be called "Major Planets." I further expect that other astronomical bodies will be added to the list of Dwarf Planets. I understand that Vesta has already applied for membership in the Dwarf Planet club.

Finally, as we approach the Autumnal Equinox, perhaps it is time to consider some of the astronomical events that occur at this time. For instance, the Autumnal Equinox occurs on different days, depending on where you are located on our planet. The time (not day) of the equinox this year is occurs at 4:03 UT on 23 September. This means that for us here in California it occurs on Sept. 22  
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### FPOA Programs: 2006

*Note: please check <http://www.fpoa.net/schedule-2006.html> for changes to events and schedules*

#### Saturday Evening Programs

<b>June:</b>	3rd, 17th, 24th
<b>July:</b>	1st, 22nd, 29th
<b>August:</b>	19th, 26th
<b>September:</b>	16th, 23rd, 30th
<b>October:</b>	14th, 21st, 28th

*The observatory is open to the public on these evenings*

#### Solar Programs

<b>July:</b>	1st
<b>August:</b>	19th
<b>September:</b>	16th
<b>October:</b>	14th

*Solar observing is offered at the Observatory during the afternoon on these dates.*

#### Board Meetings

<b>June:</b>	24th	FPOA Observatory
<b>July:</b>	29th	FPOA Observatory
<b>August:</b>	26th	FPOA Observatory
<b>September:</b>	23rd	FPOA Observatory
<b>October:</b>	21st	FPOA Observatory
<b>November:</b>	18th	FPOA Observatory

#### Special Events

<b>August:</b>	26th	20th Annual Star-B-Q
<b>September:</b>	23rd	Rob Toebe Night

#### Work Parties

<b>August:</b>	19th	Prep for Star-B-Q
<b>October:</b>	21st	Post Season Maint.

## President's Message (cont. from p. 1)

at 9:03 PM PDT. The equinox is also the day when Sidereal Time and Mean Solar Time coincide. Sometime around 1:00 PM (British Summer Time) at the Greenwich Observatory the RA on the Prime Meridian will coincide with the Prime Meridian Mean Solar Time. This is the only time that this happens each year. Finally, the length of day and night are almost the same on Sept. 22 or 23. On these days there are about 12 hours and 9 minutes of daylight. It is not 12 hours exactly because of the refraction of sunlight by the Earth's atmosphere. The date of approximately 12 hours of daylight is on Sept. 25 or 26. Finally, on the day closest to the equinox the sun rises and sets approximately due east and due west respectively.

## Rob Toebe Night—2006

*By Patrick Donnelly*

On Saturday, September 23, 2006, the FPOA held its annual Rob Toebe Night observing session. On this night we honor the late Rob Toebe by doing what he did best – observe deep sky “faint fuzzies.” Rob spent the best part of 10 years observing and sketching galaxies and globular clusters, and he took excellent care of the 30” Challenger Telescope as the Director of Instruments. It was a real shame he had to leave us so soon.

After showing the public the planets Jupiter and Neptune, a group of eight FPOA people began going through a list of Messier and NGC objects, some of which were picked because they contained only the number one (1). The night began with observations of M11 and M 110 (i.e. 111-1). After that we moved down to the constellation Sculptor and checked out NGC 253 and NGC 288. NGC 253 was huge at 133x, and NGC 288 is a big, bright globular cluster. How Messier missed these two objects is beyond me. Then it was on up to NGC 1. We found NGC 1 & NGC 2 in Pegasus just below Delta Pegasi, but the smoke from the fires up north caused the pair to be very dim. The very dim and elusive galaxy IC 1296 next to M57 was observed, and then it was time to attempt the feature of the night. We went hunting for the Einstein Cross. The Einstein Cross is located in Pegasus almost on the Celestial Equator. The lensing galaxy, CGCG-378-15 was visible, we think, but the smoke kept

## Intern Pilot Program

*By Patrick Donnelly*

This year the FPOA has started a program with Hartnell College to have some of their students intern at the observatory during the public programs. Since June 2 or 3 interns have attended each public program and have conducted many of the activities associated with the public program, including giving the presentation, running the 30” & 16” scopes, and monitoring the crowd. On behalf of the FPOA I would like to thank each intern for his or her help and eagerness. These interns include:

Zack Graham

Miles Hansen

Ulises Palmeno

Jorge Tapia

Maria Uribe

Hector Zhu



I look forward to having the interns at our public programs the rest of this year, next year, and beyond.

us from a certain observation. However, there was no sign of the lensed quasar, 2237+030. One good thing about the hunt for Einstein's Cross – CGCG-378-15, at a distance of 600 million light years, may be the farthest galaxy seen in the Challenger. It is definitely the farthest for me.

## Challenger Telescope Status

*By Ron Dammann, Director of Instruments*

The Challenger telescope early this year had a high reflectance (96%) aluminum coating applied to its primary mirror by L & L Optical in Mission Viejo, Ca. The Challenger's secondary mirror will be recoated along with the FPOA's 16" Dob's primary and secondary mirror in the December 2006-January 2007 time frame. The dates have yet to be decided (Rick get the checkbook ready).

The Challenger has been running well despite one of our senior Certified users getting the R.A. gear plastic cover caught in the worm gear. The backlash in R.A. has been eliminated and the polar alignment has been improved.

Rob Hawley early in the year had donated a new Dell computer to replace the older/slower PC in the Observing room. Now there is no more waiting for screen display updates with our "The Sky Version 5 Level 4" software as the telescope is moved. Thanks again, Rob.

**Have a picture or an article you would like published? Please submit them to [fpoa@sbcglobal.net](mailto:fpoa@sbcglobal.net).**

## Request For "Un-Used" Telescopes

FPOA has had a request for telescopes to be used for astronomy instruction by 6 to 8 graders at the Pinnacles National Monument Youth Camp. If you have a telescope collecting dust and would like to see it put to good use, you can donate it to FPOA and it will then be transferred to the Pinnacles group. FPOA will give you a "Letter of Donation" which can be used for your 2006 tax return. Contact Ron Dammann at (408)255-1863 or [fpoa@earthlink.net](mailto:fpoa@earthlink.net).

## Challenger Telescope Training Classes

We have held seven classes this year and trained 16 new Observer class members. Our youngest Certified telescope operator is Hannah Hudson, who will turn 11 years old this November. She displaced teenager Laura Clark who wrote an article for the Spring 2006 Observer newsletter. On Rob Toebe/ Members Appreciation Night, one week after she was trained, Hannah rolled back the Observing room roof and sighted the Challenger on Jupiter for our visitors. Way to go! Other Observer Class members trained in 2006 are Chai Heng, Kraig Amador, Allen Andrews, John (J.P.) O'Brien, Andrew Pierce, William Hudson, Joseph Brandt, Zack Graham, Miles Hansen, Ulises Palmeno, Jorge Tapia, Maria Uribe, Hector Zhu and our rattlesnake hunting ranger John Verhoeven.

We are trying to accommodate FPOA members in need of training on the Challenger by holding training classes throughout the year. Training usually takes 3 hours on a weekend and includes Solar Telescope training. [fpoa@earthlink.net](mailto:fpoa@earthlink.net)

## Benjamin Dean Lecture Series

The Morrison Planetarium and California Academy of Sciences are pleased to announce the Spring 2007 Benjamin Dean Lecture Series. The print brochure will be mailed in December, but as a subscriber to the Benjamin Dean E-mail List, you are receiving advance notice of the dates and speakers.

### February 20, 2007

Dr. Andrew Westphal, University of California, Berkeley

*"Stardust: First samples from the Kuiper Belt and from Interstellar Space"*

### March 19, 2007

Dr. Ray Jayawardhana, University of Toronto

*"New Worlds in the Making: Origins of Planets and Brown Dwarfs"*

### April 16, 2007

Dr. Peter Tuthill, University of Sydney

*"From Dust to Dust: the Shrouds of Stellar Birth and Death"*



*Hannah Hudson taking Telescope Certification with father, William, looking on.*



## Public Programs

As I write this, our Public Program season is almost over with October 14<sup>th</sup>, 21<sup>st</sup> and 29<sup>th</sup> remaining. Thanks to all of our FPOA volunteers who helped in "Bringing Astronomy to the Public". We also had an extra resource this year (and hopefully in the coming years) of astronomy interns from Hartnell Community College in Salinas. Your volunteer assistance is very important to the ideals to which the FPOA was founded. Please consider finding some time to assist in our Public or Special Programs this year or in 2007. You'll find it very rewarding.

*(Ed. Note: Due to delays in publishing, for which I take full responsibility, these dates have already passed.)*

## Images from the Star-B-Q...



## FPOA Email Newsletter

FPOA members wishing to be added or update new email addresses to the FPOA Members Email News List can contact Ron Dammann at [fpoa@earthlink.net](mailto:fpoa@earthlink.net). Just put "subscribe" in the Subject line.

The email news list is for updating members on news from FPOA or astronomical events in Northern California. Members can also use the email list to inform other members of activities.

### REPORTERS NEEDED!!!

The FPOA needs a few good roving reporters. You don't need to be an expert at producing purple prose; just someone willing to write a few words about FPOA events from time to time. If interested, please email me at [fpoa@sbcglobal.net](mailto:fpoa@sbcglobal.net).