

Volume 19.4  
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Fourth Quarter

# PSF NEWS

Planetary Studies Foundation

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### PSF will be featured on TLC

Please watch TLC's latest series "Accidental Fortune" on December 23rd where PSF will be featured for its participation with the Park Forest Meteorite.

Dec. 23 - 9:00 PM (CST)  
on The Learning Channel

### Member Spotlight, Sneak Peak

PSF member and chemist, Richard Persons, answers some great questions about his experience with the PSF and the future ahead of us. With an in-depth look of his life and interests, he is a great addition to this issue's *Member Spotlight*. Read his entire interview on pages 4 & 5.

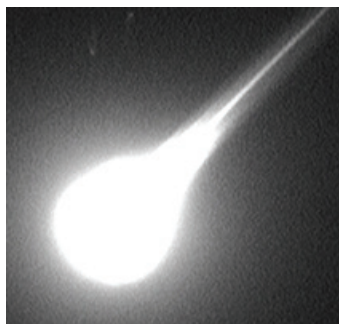
### PSF Welcomes New Employee

The PSF, in partnership with the JDCF is pleased to announce the hiring of Dr. Dan Wenny, read his biography on page 6.

## Lights, Camera, Action! Written by: Diane Sipiera

Hollywood came to Park Forest, IL this past November. Very late in October, PSF received a phone call from Mary Benjamin from Mathis Productions based out of California. She had an assignment to come up with for a series on The Learning Channel (TLC). The series would feature episodes about people who received money out of nowhere. Some of the stories featured: a man who wandered into a resale shop and purchased a baseball card of Honus Wagner for a few dollars and sold it for around \$100,000. Another man was excavating for a house on his land and came across a fossil of a mastodon. He sold the fossil and made thousands of dollars. Well, she did a little more researching and heard about the Park Forest Meteorite. She called **Blaine Reed**, a PSF member from Colorado, about it and he referred her to Planetary Studies Foundation.

Some of you may remember that on March 26, 2003 a meteor exploded over the Chicago suburbs of Park Forest, Streator, Crete and Olympia Fields. These cities were bombarded with various size fragments. The main amounts of these fragments were found in Park Forest. The Planetary Studies Foundation was the first scientific organization at the scene.



Paul Sipiera was busy identifying meteorites for the common individuals, until more PSF

members could help him with the task. **Jim Schwade** was the first PSF member there to help Paul. They put in countless amount of hours at the Park Forest Police Station identify meteorites from meteor wrongs. It was history in the making. Thousands of dollars were changing hands, from collectors and dealers to sellers. In many ways, it was a blessing for most and a curse for others.

Mary asked if PSF would help her come up with a story line for her segment. She did a great deal of research on various people, but needed more information. PSF was able to give people's names and phone numbers for her segment. Then on the weekend of November 15<sup>th</sup>, filming began in the city of Park Forest. The Park Forest Police Station and various Park Forest residents reenacted the entire event. The basis of the story stemmed from Paul Sipiera receiving the first phone call from WGN radio producer Jim Wiser. After four days of filming, the segment will be about eight minutes long.

When will this segment be on television? According to Mary Benjamin, **TLC will air "Accidental Fortune" on December 23rd at 9:00 p.m. (CST).**

PSF will also send out an "Email Blast" to all of our members who have given us their email address to remind them of the upcoming show and any other details we may receive. As members, we should be proud that individuals turn to us as resources!

## PRESIDENT'S MESSAGE

2009 has been a pivotal year for the Planetary Studies Foundation. It has been a year of great excitement with the celebration of our Twentieth Anniversary in March and the August 22<sup>nd</sup> public dedication of our new international headquarters in Elizabeth, Illinois. After twenty years, we now have a permanent home to call our own. Last year the PSF entered into a partnership agreement with the Field Museum of Natural History in Chicago to create the **Robert A. Pritzker Center for Meteoritics and Polar Studies**. This was made possible through an extremely generous donation to the Field Museum from PSF Associate Board member, **James N. Pritzker**. His donation created an endowment fund that will generate income sufficient to support a meteorite center at the museum for at least the next 100 years! For its part in this partnership, the PSF donated its world-renown **James M. DuPont** meteorite collection to the new **Pritzker Center** to join the exceptional Field Museum meteorite collection. These combined collections now represent the world's largest non-governmental collection of meteorites and rank 5<sup>th</sup> overall in the world. Thanks to Jim's generosity, the PSF is now an integral part of the Field Museum and is assured a safe environment for the protection and use of its important meteorite collection. If that was not enough, **Jim Pritzker** has also made a pledge of financial support to the PSF to expand its scientific outreach programs and to develop new areas of interest that will appeal to a wider audience. We all thank **Jim Pritzker** for his dedication to and continued support of the PSF and the Field Museum.

In response to the new directions offered by the Field Museum partnership and the Jim Pritzker grant, the PSF entered into partnerships with the **Jo Daviess Conservation Foundation (JDCF)**, the **Elizabeth Historical Society (EHS)**, and the **Apple River Fort State Historical Site (ARF)**. One of the PSF's mission goals has always been to promote and support environmental and conservation programs. In the past, our limited resources have been directed more toward astronomical and earth science education. Now, with the Pritzker grant, we are able to expand and develop programs with environmental and conservation topics for both classroom and public audiences. In cooperation with the **JDCF**, we hired Dr. Dan Wenny to serve as a community educator. Since September, Dan has been giving programs on various nature and environmental topics to diverse audiences. Beginning in June the PSF held monthly astronomical observing sessions at the Apple River Fort in Elizabeth. The actual Fort is located on a high hill about a kilometer east of the city, and offers an extremely dark sky for excellent viewing of the heavens. Our main instrument is the 8-inch Schmidt-Cassegrain telescope donated by PSF member and WLS-TV weatherman **Mike Caplan**. Each telescope viewing session is preceded by stories told around a campfire by **Diane Szipiera** that describe how native-Americans integrated the heavens into their culture. Afterwards, PSF members **Dan Wenny** and **Chris Zirtzman** work the telescopes and introduce many first-time viewers to the wonders of the heavens. Since September, the PSF has provided public tours of its historic **1876 Banwarth House** on Saturdays to the general public. Led by **Diane Szipiera**, her staff of **Jolene Foat**, **Grace Tindell**, and **Elizabeth Myelle** dress up in period costumes and provide a 60 minute, information-packed, tour of the house. This has become an extremely popular activity and has attracted a large number of visitors from all over the state. In addition, we are cooperating with the **EHS** and the **Elizabeth Chamber of Commerce** to make our **1876 Banwarth House** a featured attraction on the local tourist circuit.

At the Annual Members Meeting in August, Executive Board members **Robert Renguso**, **Jennifer Schrank** and **Paul Solarz** indicated that they could no longer serve in that capacity. I would like to thank the three of them for their many years of service to the PSF. At the same time, I would like to welcome back Founding Member **David M. Lauer** to the Executive Board.

From my family to yours, I wish everyone a Happy Holiday Season and the very best for the New Year.

**Paul P. Szipiera**

**DONOR'S SPOTLIGHT**

**\$1,000.00 - \$5,000.00**

**Audrey and Albert Ratner  
Tawani Foundation**

**In celebration of Hanukkah,  
Audrey and Albert Ratner  
are pleased to make their donation  
to honor of their son,  
James N. Pritzker, COL (IL) ARNG (Ret.).**

**RENEWING MEMBERS**

*Individuals:*

*Contributing Member:*

**Cecilia Cooper  
Leonard Johnson  
Alan Kanter  
Richard Persons  
Catherine Rudolph**

**Lawrence W. Knight**



**Happy Holidays & Season's Greetings**

*All of us at the Planetary Studies Foundation and the 1876 Banwarth House  
wish you and your families a joyous holiday season!*

# Member Spotlight: RICHARD PERSONS

Interviewed By Diane Sipiera

*Richard Persons was born on March 18, 1935 in Superior, Wisconsin. Richard and his wife Alimae reside in Oswego, Illinois. They have been married for 46 years. They have three children: Alisa, Allen and Michael. Richard was a chemist for 35 years for the Fox Metro Water Reclamation District in Aurora, Illinois. At this facility, Richard was senior chemist. He retired from this facility 9 years ago and now has the ability to pursue other interests.*

## WHERE DID YOU GO TO COLLEGE?

**Richard Persons:** I had the privilege to attend Superior State Teacher's College in Superior, Wisconsin. My childhood home was a few blocks from the campus. The college is now called the University of Wisconsin Superior. It is about as far north as you can go. Matter of fact, Arnold Schwarzenegger also graduated from there, just a different year. I majored in chemistry and minored in geography, geology and mathematics in 1959.

## WHAT DID YOU DO AFTER GRADUATION?

**RP:** My first position I held was in Two Harbor Minnesota teaching high school physics, chemistry and physical science. I was there for a year because a teacher took a leave of absence. Then, I thought I would like to work on my masters degree at Iowa State University in Ames, Iowa. I was a teacher assistant there and wasn't quite sure about teaching college. Shortly after, I received a phone call from Northwestern High School in my old hometown of Superior to teach chemistry and mathematics. It was fine for awhile, but I really wanted to pursue my masters. I was accepted at Southern Illinois University in Carbondale. Once again, I became a teacher's assistant. But before I knew it, I fell for my one true love and that was Alimae. She was going there also for her degree in English. I fell in love with her and couldn't be without her. We got married in 1963 and started our family. I never finished my masters degree, but I was very much a go-getter and read a great deal. Now that I had a family, I needed to provide for them. I wanted to work for Eastman-Kodak Company. My hobby has always been photography. I'll tell you more about that later. But I had the opportunity to work for the State of Illinois in water control. They had all of these branches throughout the state and they asked me which branch I wanted to go to. Talk about a crazy way of selecting your location. I was from Northern Wisconsin and Alimae was from Missouri. So, I took a rough estimate of the distance of the two and I ended up in Aurora. That was real logic. Just joking! My position at Fox

Metro was testing water control. I loved my position with them, which I stayed around for 35 years. They were great for me and gave me wonderful opportunities. I couldn't ask for a better employer.

## WHAT OTHER INTEREST DO YOU HAVE?

**RP:** I have always loved photography. Photography was always a deep-rooted passion of mine. Since I was so involved with chemistry, the two worked hand-in-hand. I did so much film processing throughout my life. That is one reason I wanted to work for Eastman-Kodak. I probably should have taken stock in them. At that time, I would have loved to have really worked for them. But, when looking for a job, I needed one right at that moment and wanted to be responsible. I still love photography. It's definitely an art form that can be appreciated. The artistry is like no other, besides painting probably. You can capture a certain glance or a time in history. It's so wonderful!

I also loved my 1954 Harley Davidson dual glide. That bike just floated over the road. I'm very lucky to still have it. One of my sons is now renovating it. It's definitely a collector's item.

## HOW DID YOU GET TO KNOW ABOUT PSF?

**RP:** Well, first there wasn't a PSF when I met Paul. About 30+ years ago I was involved with the Illinois Academy of Sciences based out of Springfield, Illinois. They held their conference that year at Eastern Illinois University and Paul was doing a workshop on Quarry Fossils at a near by quarry. I was so impressed by this young scientist. He knew a great deal about a little bit of everything. If he didn't know, instead of faking it, he stated he would find out and get back with you. It was nice to know a man of honesty. Shortly after, the Adler Planetarium was offering classes to the public about astronomy and space. I was always interested in astronomy because of the chemistry in stars and the planets. There were several

instructors, and whom do I see as an instructor? Paul Sipiera. Yes, that was the young man I met at the Illinois Academy of Sciences a few years prior. There was another young lady I met who just couldn't learn enough about astronomy and space science, and that was a lady named Joan Reylek. She too is a PSF member. We took several classes together from that lecture series.

A little after that, Paul stated that he was going to start his own science organization called the Planetary Science Foundation. It would be based out of Palatine, IL. Right away I wanted to sign up because I believed in him and what he was doing. Not to brag, but I was one of the first members of PSF. I've been a faithful member for 20 years and love it.

#### WHAT DO YOU THINK OF THE PSF FUNDRAISING DINNERS?

**RP:** I think I only missed one of them. I just loved the speakers. My wife and I find them very entertaining. One of my favorite dinners was this one, when we sat next to this young man who was without an escort. We spent a couple of hours talking about how chemistry is used in the space program both in planetary geology and organic chemistry. We had some real deep philosophical ideas about what is possible and what is not possible in space. Right after the main meal was served, Joe Auer, chairman of the board did the introduction for the main speaker and that was Andre Bormanis. He was the chief science writer and scientist for Star Trek. I was sitting next to this celebrity, who was so kind and respectful. When his talk was over and he came back to his seat next to me, he stated, "Where did we leave off?" I was so impressed with him.

Alimae and I really enjoyed all of the astronauts. Their stories were similar, yet different. I also liked Charlie Duke this past dinner. I think it was one of the men from the Field Museum who asked him, "Was there a certain song, poem or saying that you thought of when you stepped upon the moon?" Charlie thought a minute and said, "No!" It was so honest and true, everyone laughed at his honesty.

#### HAVE YOU ATTENDED ANY OF THE OTHER PSF FUNCTIONS?

**RP:** Yes, I have. I went to a few lecture series and I went to the Challenger Learning Center to see Bill Hartman, who wrote the book, *Traveler's Guide to the Solar System*. What a great guy!

#### WHAT BRINGS YOU OUT TO GALENA IN NOVEMBER?

**RP:** Well, at the last PSF dinner in March, Alimae and I bid on an auction item for a night stay at the Farmers Guest House in Galena with a variety of restaurant coupons. We decided to use it. We gave Diane a call to let her know that we were using our package. She stated she'd like to go to lunch with us and

take us for a tour of the new PSF's Banwarth House. Wow! Did this little gem ever surprise us! My wife has been an interpreter in the past and she looks for detail and accuracy. She was very impressed by the historical content of the house. PSF should be very proud of this wonderful find. The basement is wonderful with the limestone foundation, but Paul did a wonderful tribute to all of the PSF's accomplishments. I am so proud to be a member of this diverse group and I can't wait to continue. Alimae and I hope to come out here maybe next spring. She has a dress form that she would like to donate to the Banwarth House. It's nice to see that Alimae wants to get involved somehow. It's sort of nice to see some of PSF's new changes.

#### WHAT CHANGES DO YOU LIKE?

**RP:** Well, first I like that PSF finally has a real home. The Banwarth House is a concrete object that you can call "home". Diane and Paul have done a wonderful job in making this feel like "home". You can tell your friends about it, they can come out and see it. It seems like anyone in Chicago and the suburbs knows about Galena and wants to know if you might know of something you can do besides shopping. Well, there's the Banwarth House and PSF now has all these programs to offer. I think it fantastic that PSF is having all of these programs dealing with the environment. What's more heavenly than Galena? Galena makes you feel that you're in a special place. It's great that PSF is doing all of these community outreach programs in the rural areas. It's also nice to see that PSF is going into classrooms and teaching a variety of science topics in conjunction with classroom teachers. Classroom teachers need PSF as enrichment in their schools. We really need to teach the young in the area of sciences. Our job as PSF members is to help the PSF instructors to get out to the community and inform them about our mission. As members we need to be role models and to support PSF staff in anyway we can. The astronomy programs at the fort seems very receptive, in which we would like to participate in. We can't wait to come back.

#### ANY ADVICE TO OUR YOUNG READERS?

**RP:** First, as older adults we really need to encourage the young to take interest in science and math. We need to stop being selfish and lead by example. The United States is really falling behind in science. For our young readers or teachers, learn a great deal by reading on your own. Don't be afraid to ask questions and if the teachers don't know the answers, turn to books and the internet. If it seems like you hit a brick wall, just pick yourself and try again. Just read!





# Banwarth Bulletin

## Dan Wenny – Community Educator

By Christie Trifone

The Planetary Studies Foundation and the Jo Daviess Foundation announces that their organizations are expanding their staff in order to increase its outreach in Jo Daviess County and beyond.

A community educator is a shared position funded by a grant, which is filled by Dr. Dan Wenny. Dan will travel the county conducting community outreach and educational programs through planned events, public presentations, outdoor recreational tours, and activities for both PSF and JDCF. He will also organize projects for JDCF's volunteers to carry on its various properties.

Dan is well suited for the new position having the past years with the Illinois Natural History Survey developing research projects and monitoring programs, conducting site tours, and working alongside volunteers on many different projects.

Dan is an avian ecologist, having earned his Ph.D. from the University of Florida. He lives with his family in Galena and enjoys music, bird watching, soccer, disc sports, camping, and word games. If you would like to contact Dan, he can be reached at (815) 858-9100 or [dwenny@jdcf.org](mailto:dwenny@jdcf.org).



## A Season Filled with Opportunity and Fun

By Diane Sipiera

This fall season has been a lot of fun at the 1876 Banwarth House. We've been open for historical tours every Saturday from 9:00 a.m. to 3:00 p.m. We have had a lot of visitors that stop specifically for us, and we have also received an overwhelming interest from visitors of the Apple River Fort.

This past year has been very memorable too at the Banwarth House with such PSF activities as:

- Annual PSF Member's Meeting
- Unveiling of the Banwarth Watercolor Painting
- Telescope & Folklore Storytelling of the Nighttime Sky
- Santa's Visit

We will be looking for volunteers to serve as tour guides. If you enjoy talking about American history and want to come out and have a lot of fun, please contact me at (815) 858-2014 or [dsipiera@planets.org](mailto:dsipiera@planets.org). For more information or to get directions to the Banwarth House, please visit: <http://www.planets.org/banwarth.htm>

# *The Banwarth House Activities*

## **Winter Lecture Series 1:00 - 3:00 PM**

Banwarth House, 408 E. Sycamore St., Elizabeth  
(Behind Law & Jones Funeral Home)

### **Jan. 9 - History of the Banwarth House, Speaker: Diane Sipiera**

Learn about the historical preservation of this 1876 house and the prominent owners of a blacksmith shop, wagon shop, furniture store, and funeral home.

### **Jan. 23 - Ecosystem Services Provided by Birds, Speaker: Dan Wenny**

What do birds do in ecosystems and why are birds so important? Learn about the ecological roles birds fill, cultural significance of birds, and economics of bird conservation.

### **Feb. 13 - How to Recognize a Meteorite from a “Meteorwrong”, Speaker: Paul Sipiera**

Presentation on the scientific importance of meteorites. View meteorites and compare. If you think you may have a meteorite, bring it in.

### **Feb. 27 - Spinning Wheel, Round and Round, Speaker: Jolene Foat**

Preserving the past art form of spinning wool. Observe the steps in spinning and the process of getting the wool.

### **Mar. 13 - Hot Rock on Blue Ice, Speaker: Paul Sipiera**

The search for meteorites in Antarctica.

### **Mar. 27 - The Wonders of Bird Migration, Speaker: Dan Wenny**

Learn the who, how, where, and why of avian migration.

## *Other Activities*

### **CANDLELIGHT HIKE, SNOWSHOE HIKE OR CROSS COUNTRY SKI**

Saturday January 30, 2010, 4:30 – 8:00 PM. Casper Bluff Land & Water Reserve.

Luminary-lit trails for all ages and abilities, snow or no snow. Sledding, snowshoe hiking and cross country skiing if snow conditions suitable. Enjoy roasting marshmallows and sipping cocoa around a bonfire. Stargazing and constellation identification program if skies are clear. \$5 donation requested. Bring your own sleds. Snowshoe and ski rental available: call 815-776-9425 and leave message or visit [www.fefferiveroutfitters.com](http://www.fefferiveroutfitters.com).

## NASA Launches A New Website for Teenagers

NASA has launched a new website specifically created for teenagers. The website provides access to current NASA spacecraft data for use in school science projects, allows them to conduct real experiments with NASA scientists and helps them locate space-related summer internships.

The website, called "Mission Science", is designed to showcase NASA's educational science resources and encourages students to study and pursue careers in science, technology, engineering and math (or STEM). "This site will allow teenagers, who have their own unique language and style, to get information faster and have fun at the same time," said Ruth Netting, manager of education and outreach activities in NASA's Science Mission Directorate at NASA Headquarters in Washington. "NASA provides a vast amount of STEM information online for students of all ages, but this Web site boosts the content available for this age group."

The site also features social networking tools, links to enter science contests or participate in a family science night, information about college research programs, and an array of NASA images, animation, videos and podcasts.

To visit this website, go to <http://missionscience.nasa.gov>

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## Fun Experiments To Try At Home

Below is one example of a fun experiment you can find on the website above. It's advanced enough, that the most hands-on teenager should feel challenged, and the instructions are clear enough that it will give you something fun to do with your children when you're looking for something constructive to do during winter break. Remember: the only way to get your son or daughter interested in the sciences, is to do activities that promote positive experiences and to encourage them to expand their knowledge!

### ***BUILD YOUR OWN TELESCOPE***

Description: A simple refractor telescope is made from a mailing tube, Styrofoam tray, rubber cement, and some lenses.

Objective: To build a simple astronomical telescope from two lenses and some tubes.

Materials:

Paper mailing tube (telescoping - 1 inside tube and 1 outside tube)

Styrofoam trays (1 large and 1 small)

Lenses (1 large and 1 small. See note about lenses.)

Metric ruler

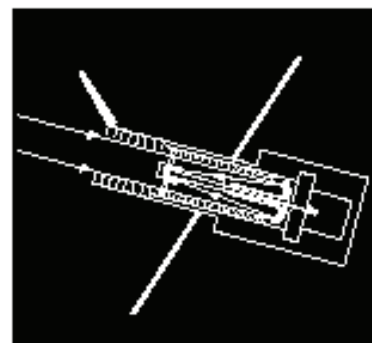
Razor blade knife

Cutting surface

Marker pen

Rubber cement

Fine grade sandpaper





## **BUILD YOUR OWN TELESCOPE con't.**

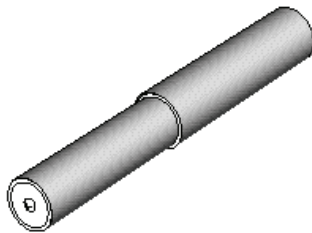
### **Procedure:**

1. Cut a short segment from the end of the outside tube. This circle will be used for tracing only. Place the circle from the larger tube on the large tray. Using a marker pen, trace the inside of the circle on to the bottom of the tray three times.

2. Lay the large (objective) lens in the center of one of the three large circles. Trace the lens' outline on the circle.

3. Cut the circle with the lens tracing from the tray using the razor blade knife. Be sure to place the styrofoam on a safe cutting surface. Cut out the lens tracing, but when doing so, cut inside the line so that the hole is slightly smaller than the diameter of the lens.

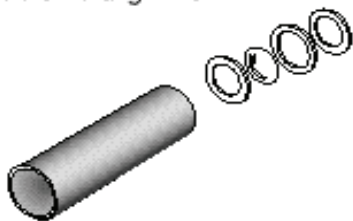
4. Before cutting out the other two large circles, draw smaller circles inside them approximately equal to 7/8ths of the diameter of the large lens. Cut out both circles inside and out.



5. Coat both sides of the inner circle (the one that holds the lens) with rubber cement and let dry. Coat just one side each of the other two circles with cement and let dry. For a better bond, coat again with glue and let dry.

6. Insert the lens into the inner circle and press the other circles to either side. Be careful to align the circles properly. Because the outside circles have smaller diameters than the lens, the lens is firmly held in place. You have completed the objective lens mounting assembly.

7. Repeat steps 1- 6 for the inside tube and use the smaller lens for tracing. However, because the eyepiece lens is thinner than the objective lens, cut the inner circle from the small tray. The foam of this tray is thinner and better matches the thickness of the lens.



8. After both lens mounting assemblies are complete, lay the fine sandpaper on a flat surface and gradually sand the edges of each lens completed mounting assembly to make them smooth. Stop sanding when the assemblies are just larger than the inside diameter of the corresponding tube. With a small amount of effort, the assembly will compress slightly and slip inside the tube. (Do not insert them yet.) Friction will hold them in place. If the lens assemblies get too loose, they can be held firmly with glue or tape.

9. Hold the two lens assemblies up and look through the lenses. Adjust their distances apart and the distance to your eye until an image comes into focus. Look at how far the two lenses are from each other. Cut a segment from the outside and the inside tube that together equal 1 1/2 times the distance you just determined when holding up the lenses. Use the sandpaper to smooth any rough edges on the tubes after cutting.

10. Carefully, so as not to smudge the lenses, insert the objective lens assembly into one end of the outside tube and the eyepiece lens assembly into the end of the inside tube. Slip the inside tube into the outside tube so that the lenses are at opposite ends. Look through the eyepiece towards some distant object and slide the small tube in and out of the large tube until the image comes into focus.

11. (Optional) Decorate the outside tube with marker pens or glue a picture to it.

### **Discussion:**

You just constructed a type of telescope known as a refractor. Refractor means that light passing through the objective lens is bent (refracted) before reaching the eyepiece. Passing through the eyepiece, the light is refracted again.

This refraction inverts the image. To have an upright image, an additional correcting lens or prism is placed in the optical path. Astronomers rarely care if images are right-side-up or upside-down. A star looks the same regardless of orientation. However, correcting images requires the use of extra optics that diminish the amount of light collected. Astronomers would rather have bright, clear images than right-side-up images. Furthermore, images can be corrected by inverting and reversing photographic negatives or correcting the image in a computer.

### **Notes About Lenses and Tubes:**

Refer to the Lenses and Mirrors activity for information on how to obtain suitable lenses for this activity. PVC plumbing pipes can be used for the telescoping tubes. Purchase tube cut-offs of different diameters at a hardware store.

**For this experiment, and many more...**  
<http://missionscience.nasa.gov>

## Kennedy Space Center Powers on Solar Energy Future



KSC Director Bob Cabana (left) and Roderick Roche of SunPower Corp. and Florida Power & Light's Eric Silagy

NASA's Kennedy Space Center turned a shade greener Nov. 19 with the addition of five acres of electricity-producing solar panels to the spaceport's power grid.

The Kennedy Solar Energy Center is the first of two new power facilities being built at Kennedy that use solar panels to convert sunlight into electricity. The process creates no carbon emissions and requires no fuel, such as oil or natural gas, to generate power. It is the first large-scale power plant of its kind at a NASA center, and part of a small but growing solar infrastructure under development in Florida.

"We are taking a leadership role in supporting an important national goal and that's to increase America's energy independence while protecting the climate," said Bob Cabana, director of Kennedy.



More than 3,300 solar panels have been erected on a vacant five acres at KSC in Florida

A ceremony commissioning the first of two power plants also offered a glimpse at future projects that could include permanent renewable energy research and development center proposed for Kennedy. A plan to build solar panels on up to 500 acres of fallow agricultural land also is under consideration depending on the environmental and economic feasibility. For now, the solar farms under construction help show the way for electricity generation.

Built in the center's Industrial Area south of the Vertical Integration Facility, the solar farm is large enough to create one megawatt of electricity, or enough to power 110 homes. For Kennedy, the power output equates to about 1 percent of the center's electricity uses.

A second, much larger, solar energy complex is under construction in a former citrus grove at the south end of the center. That location will produce 10 megawatts of electricity and is scheduled to be finished in April 2010. It will be plugged into FPL's network and distributed to the utility's other customers.

"The fuel for this is always free," said Eric Silagy, FPL vice president and chief development officer. "Solar power is ready to take center stage here in the sunshine state." SunPower Corp. designed and built the facility by mounting 3,344 panels atop 1,183 piers. The structures are designed to withstand 130 mph winds.

Compared with a conventionally fueled power plant, the solar energy center is relatively simple. All the panels have to do is let the sun hit them to produce current. It can be monitored remotely and its maintenance needs are expected to be quite small, said Roderick Roche, senior manager in SunPower's program office.

The panels are tilted 20 degrees facing south. Their greatest energy producing time will be in April, from 11 a.m. to noon. Predictably, January conditions are the least favorable for power generation, but that won't stop the panels from working even in the winter.

Jim Ball, program manager for Center Development at Kennedy, said it would take a tremendous amount of new solar facilities to fulfill all of the center's electricity requirements, but that may become possible as the technology improves and new efficiencies develop. "We're in the right place at the right time," Ball said.

## Get Involved with the PSF



After our headquarters has changed from the suburbs of Chicago to the northwest tip of Illinois, we are very conscious that the majority of our programs and activities have relocated accordingly. To keep all of our members fully engaged I would really like to extend the invitation to all of our members to participate either on a committee (one that would create activities such as; lectures, sky observing, experiments for kids) or to keep ongoing conversation of activities you've heard of or ones you are planning to attend.

In 2009, we also introduced a new communication tool called *PSF BLAST* which allows us to do a mass email to all of our members and friends of the organization letting them know of updates and activities that we have going on. This has been well-received and has really encouraged more participation than we have seen in the past. If you have an idea, would like to host a PSF event or have an event in mind that may interest our members, please let us know!

If you are interested in getting more involved with the PSF or have some ideas you would like to share, please do not hesitate to contact us at (815) 858-2014 or email us at [Andrea2986@aol.com](mailto:Andrea2986@aol.com).

## First Quarter Sky Events

**Jan. 3, 4 – Quadrantids Meteor Shower**

**Jan. 11 – Full Moon**

**Jan. 26 – New Moon, Annual Solar Eclipse**

**Feb. 3 – NASA Solar Dynamics Observatory Launch**

**Feb. 4 – NASA STS-130 Launch**

**Feb. 9 – Full Moon, Penumbral Lunar Eclipse**

**Feb. 22 – Conjunction of Jupiter, Mercury and Mars**

**Feb. 25 – New Moon, NASA GOES-P Satellite Launch**

**Mar. 8 – Saturn at Opposition**

**Mar. 11 – Full Moon**

**Mar. 18 – NASA STS-131 Launch**

**Mar. 20 – Vernal Equinox, Sun-Earth Day**

**Mar. 25 – Venus as both a morning and evening star. This happens once every eight years.**

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