



Dudley Observatory
107 Nott Terrace, Suite 201
Schenectady, NY 12308



Details & updates at www.dudleyobservatory.org

ADDRESS CORRECTION REQUESTED

Rising Star Interns

Welcome Back Picnic & Observing for Rising Star Interns

Rising Star Interns (new & old!), their families, and mentors are invited to a potluck picnic and star party. RSVP 382-7583

When & Where

Saturday, Sept 24 at 7:00 PM
Five Rivers Environmental Education Center

2nd Chance to hone skills

Sunday, Sept 25 at 7:30 PM
Five Rivers

We welcomed eight new Rising Star Interns in June: **Claire Normile**, Troy HS; **Keith Tygert**, Schalmont HS; **Amanda Eckert**, Bethlehem HS; **Greg Razzano**, Shaker HS; **Alexis Piel**, Lisha Kill MS; **Sara Eckert**, Bethlehem HS; **Kaysha Haile**, Schalmont HS; and **Lizzie Dawson**, Clayton A. Bouton HS – Voorheesville. The evening concluded with an opportunity to look at Jupiter through the new telescopes.

Congratulations to graduates **John Qi**, **Darren Grau** and **Jeremy Gard**.



Dudley Rising Star Interns **Hanna Birkhead**, **Blair Coppola**, and **Lynnette Cole**, at the Science Teachers Association of New York State (STANYS) conference at Siena College.

Photo by Janie Schwab



Dudley Observations

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www.dudleyobservatory.org

FALL 2005

Announcing "Friends of Dudley Nights"

Visit the observatories and planetariums!

DUDLEY NIGHT AT...

Sept 23	Union College Observatory
Oct 7	Hirsch Observatory at RPI
Nov 4	Schenectady Museum & Planetarium
Dec 9	University at Albany (SUNY)
Jan 27	Henry Hudson Planetarium

In collaboration with the local observatories and planetariums, Dudley Observatory is hosting a series of evening programs providing an opportunity for the astronomy community to explore facilities and resources in the Capital Region. Events will include a combination of tours, observing, talks, and shows.

Details & updates at www.dudleyobservatory.org

*Events are free, rain-or-shine, and open to the public
RSVP 382-7583 to reserve your spot!*



Welcome to the Board!

Michael C. Clarke, JD
Dr. John Delano
Mary B. Kosky
Dr. Philip G. Kosky
Brian D. Mercy, Esq.
Harvey Patashnick

Emeritus Members

Dr. Ralph Alpher
Dr. Tom Carroll
Dr. Tom D'Andrea
Dr. Keith Ratcliff

Thirty Things You've Never Heard Of

On a nice clear night, you take your telescope out beneath the stars and wonder what to look at. You've gazed upon the Andromeda Galaxy, the Ring Nebula, the Great Cluster in Hercules, and the Pleiades a hundred times. What else can you see? **Sue French** will introduce you to some of the lesser known wonders of the deep sky, including treats to enjoy with any size scope, at the Sept. AAAA meeting. All meetings are free and open to the public.

When & Where

Tuesday, Sept 20
7:30PM
Schenectady Museum
15 Nott Terrace Heights
Schenectady, NY 12308

Sue French is on the Dudley Observatory Board of Trustees and writes for several astronomy magazines, as well as being a member of the Albany Area Amateur Astronomers.

History of Astronomy Awards

Origins of the Constellations

Pollock 2003 winner, **Bradley Schaefer**, studied a poem based on the observations of the Greek astronomer Eudoxus, one of the first people in history to attempt an accurate description of the constellations. Schaefer related the literary evidence to calculations of the positions of the stars in times past, enabling him to determine that the work is based on observations made in Mesopotamia (Iraq) in about 1100 B.C.

Southern Observatories

Pollock 2005 winners, **Dr. Santiago Poaloantonio** from Argentina, and **Dr. Jorge Bartolucci** from Mexico, will delve into the Dudley Observatory Archives to research the scientific, social, economic and political influence of the Dudley Observatory on the establishment of the National Observatory of Cordoba Argentina. Benjamin Gould was the first director of both the Dudley and the Cordoba Observatories.



Photo by Ron Bannell

Pollock 2004 winner, **Trudy Bell** (l), with Director Janie Schwab after the talk, "Heartbreak at San Luis", on the history of Dudley's Argentina observatory. Trudy recently won the Griffith Observatory - Boeing Essay Contest with her article on San Luis.

Dudley Observatory Nights - 382-7583 to reserve your spot!

Observe with 20" Telescope

The Union College Observatory in the Olin Science Center will be open from **8-10 pm on Friday, September 23** for viewing with the 20" Ritchey-Chretien Cassegrain telescope. Targets will include the famous Ring Nebula and the Dumbbell Nebula in the summer Milky Way. If clouded out, we will provide a tour of the Observatory and tell you about improvements currently under way.



Observing at Hirsch

The Hirsch Observatory will treat you to a tour and observing through the large telescope in the dome on **Friday, October 7 at 8 PM**. Several smaller scopes will be set up on the roof deck. If cloudy, the tour will be followed by a program investigating favorite astronomy web sites, or a related movie. The Observatory is located on the roof of the Jonnson-Rowland Science Center at RPI in Troy.



Light Years From Andromeda

The Schenectady Museum and Planetarium on Nott Terrace Heights in Schenectady will hold an open house on **Friday, November 4 at 7:30 PM**. The Planetarium show "Light Years From Andromeda" will be featured, and the exhibits and gift shop will all be open.

Other Worlds-The Amateur's Contribution by Josh Marsfelder

Though it is impossible not to acknowledge NASA's contributions to modern astronomy, it is only part of the vast astronomical community that probes the deep skies every night. We amateurs can make significant advancements.

One of the ways is through extrasolar planetology. An extrasolar planet is one that orbits another star. Since these planets are so far away, it's impossible to take a visual picture, however, there are ways to find them. One of the new, up-and-coming methods is the Transit Method.

A Transit occurs when a planet crosses the face of its host star. Many amateurs watched the Transit of Venus across the Sun this past summer. A planet the size of Jupiter would dim the light coming from the star by about 1%. This is detectable through commercially-available CCDs. (Charged Coupling Device)

A CCD photometer mounted on a telescope would measure the light coming from a star. If the CCD picks up a gradual dip in the photon count, then a

gradual increase, the star's light is being dimmed by something. That "something" is quite possibly a planet. In August 2004, a wholly amateur-based program detected a dip in a star's light emissions. These data were checked and double-checked, and it was soon apparent that they had discovered an *entirely new* extrasolar planet. This planet was named TrES-1.

The case of TrES-1 is inspirational. It shows how an amateur, or group of amateurs, can make a major contribution to science. One of the most ambitious groups, www.transitsearch.org, recently posed a challenge to amateurs to discover new planets. I am confident they will succeed, and yet another planet will be discovered by an amateur. Perhaps the next generation of extrasolar planet hunters is waiting, right now, to be inspired, to get involved, to prove themselves.

Perhaps they're reading this article.

Josh Marsfelder is a Rising Star Intern at the Dudley Observatory, and a student at Granville Jr/Sr HS, where he is in the Science Research course. The complete essay may be read on our website.

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The Earth's Moon and Conspiracy

Observation of the moon using the 16-inch Cassegrain telescope located on the roof of the Earth Science building will accompany two fascinating presentations given by **Professor John Delano**. **7:00 PM Friday, Dec 9** Lecture Center 1: Summary of features on the Moon, and major scientific results from lunar samples. Apollo lunar samples will be available for examination.

9:00 PM in Lecture Center 1: Professor Delano will discuss the infamous Fox Entertainment Group's program "Conspiracy Theory: Did we land on the Moon?" That program interviewed "experts" who claimed to have evidence that the Apollo landings had been faked by NASA.

Lecture Center 1 is located near the Earth Science building on the uptown campus at 1400 Washington Avenue. A detailed map can be found at <http://www.albany.edu/maps/uptownmap.html> Parking (free) will be available in the State Quad parking lot located about 300 feet east of the Earth Science building.

Professor Delano is the Vice President of the Dudley Board of Trustees. He is also a SUNY Distinguished Teaching Professor. His research, which is funded by NASA, involves chemical and isotopic analysis of Moon samples collected by the Apollo astronauts.

Ancient Horizons and Egyptian Astronomy

Journey back in time at the Henry Hudson Planetarium and explore the astronomy of ancient Egypt. Discover the importance of the stars, planets and astronomical phenomena in guiding the Egyptians in the construction and alignment of the tombs and temples and creation of early zodiacs and calendars. You will have an opportunity to see the skies as the Egyptians saw them thousands of years ago.

Friday, January 27 at 7:30 PM at the Henry Hudson Planetarium, Albany Heritage Area Visitors Center, corner of Broadway and Clinton Ave. in downtown Albany. Free parking is accessible via Spencer St.

(The corresponding archaeology exhibit "Excavating Egypt" will be at the Albany Institute of History & Art from late January to June)

