

The Skyscraper

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Amateur Astronomical Society
of Rhode Island

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See back page for directions to
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The Skyscraper

September 2005

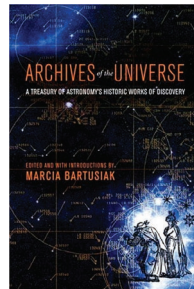
September Meeting with Marcia Bartusiak

FRIDAY, SEPTEMBER 2, 7:30PM AT SEAGRAVE OBSERVATORY



For our September meeting we are very pleased to have with us, Marcia Bartusiak, Visiting Professor of Science Writing at Massachusetts Institute of Technology.

From Copernicus and Newton to Penzias and Wilson—these are just a few of the scientific notables that will be discussed by Marcia as she reviews some of the greatest discoveries in the history of astronomy. Quoting from the primary documents assembled in her latest book, “Archives of the Universe,” she will reacquaint us with the words of the astronomers themselves: from Aristotle, proving that the Earth is round, to 20th-century observers forced to acknowledge the existence of black holes, Big Bang radiation, and a bubbly network of galaxies spread throughout the universe.



SEPTEMBER 2005

2
FRIDAY

7:30PM **September Meeting**
Seagrave Observatory

3
SATURDAY

8:00PM **Public Observing Night**
Seagrave Observatory

10
SATURDAY

8:00PM **Public Observing Night**
Seagrave Observatory

17
SATURDAY

8:00PM **Public Observing Night**
Seagrave Observatory

24
SATURDAY

8:00PM **Public Observing Night**
Seagrave Observatory

30
FRIDAY

6:30PM **AstroAssembly Friday
Night**
Seagrave Observatory

Oct. 1
SATURDAY

9:00AM **AstroAssembly 2005**
Seagrave Observatory

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President's Message

Dave Huestis, President

A special thank you to Steve Hubbard for his persistence in procuring Dr. Robert Wilson for our August meeting. That's the first Nobel Laureate for Skyscrapers. This was a chance of a lifetime to hear from someone firsthand who changed how we look at the universe. Thank you Dr. Wilson for enlightening us. I still find it hard to fathom that 2 grams per cubic centimeter made all the difference in the fate of the (current) universe! Also, Rick Lynch went above and beyond the call of duty. He drove to Cambridge to pick up Dr. Wilson and deliver him to Seagrave for his talk. Afterwards Rick returned Dr. Wilson back to Cambridge. The word is Dr. Wilson really enjoyed himself and wants to come back sometime maybe as early as AstroAssembly. Thanks to the membership for a great turnout, and a huge thanks to Rick for his efforts.

Many thanks to member Tracey Haley who recently installed a floor electrical outlet in the meeting hall, and also installed an outside outlet for use during our annual picnic and AstroAssembly. Tracey donated both his time and the parts to Skyscrapers. Thank you Tracey.

Thanks once again to Dolores for being our hostess for the refreshments. The change of venue to outside in the courtyard worked well, though I noticed that folks still "hovered" around the refreshment tables. At least no one got trampled by the crowd.

I hope you will attend the September monthly meeting, despite the fact that it is on Friday, September 2, the beginning of the Labor Day holiday weekend. We were fortunate to schedule a visit by our guest speaker, Marcia Bartusiak. She will be talking about her new book, "Archives of the Universe, a Treasury of Astronomy's Historic Works of Discovery". Hopefully copies will be available for purchase.

If you can't make our September meeting, I wish you a happy and safe holiday weekend.

SKYSCRAPERS FIELD TRIP TO THE

Springfield Museums

INCLUDING THE SEYMOUR PLANETARIUM AND
OBSERVATORY

SPRINGFIELD, MASSACHUSETTS
SATURDAY, OCTOBER 8, 2005

Continuing the great Skyscraper tradition of field trips to astronomical and cultural places of interest, please join President Dave Huestis on a visit to western Massachusetts to visit the Springfield Museums, a consortium of museums providing a variety of exhibits.

At the Science Museum, our good friend Richard Sanderson will treat us to a free show at the Seymour Planetarium (featuring the Korkosz planetarium projector, completed in 1937 ... the oldest American-made planetarium in the world) including a "behind the scenes" look. He will also provide a tour of the museum's observatory, which houses a 20-inch Schmidt Cassegrain telescope made by the Springfield Stars Club. Folks will also be able to visit any of the associated museums.

Museum group rate admission (10 or more) will be \$6.00/adults and \$2.50/children under 18. The admission fee is good for all the associated museums listed below.

If you have Internet access you can visit the Springfield Museums home page at <http://www.quadrangle.org/visit.htm>, else see the list below.

- The George Walter Vincent Smith Art Museum, the Museum of Fine Arts, and the Connecticut Valley Historical Museum.
- The Springfield Science Museum
- The Genealogy & Local History Library in the Connecticut Valley Historical Museum
- The Dr. Seuss National Memorial Sculpture Garden

I chose the date of October 8 for two reasons. One, it is the beginning of the Columbus Day weekend. Two, the fall colors should still be at peak!

If folks want to stay overnight/over weekend in the Springfield area, they can. There are many attractions in the general area, including: The Basketball Hall of Fame, Yankee Candle up in Deerfield, the Norman Rockwell Museum and the Mohawk Trail, just to name a few. Visit <http://www.valleyvisitor.com/> for additional information.

More details will follow once all the logistics are worked out.

Are you interested? Please put your name, phone number and email address on the sign-up sheet provided at the September meeting or email me with the information.

September Astronomy Highlights

Dave Huestis, President

I look forward to September, especially this summer. We've experienced many days of 90+ degree temperatures, and many nights have been extremely hazy, not allowing us great views of the sky. Once we get to mid-September the hazy, hot and humid days are gone, and the starry night sky is returned to us with cool evenings and clear, transparent seeing conditions.

Like the last few Septembers, it's too bad we don't have any major astronomical events to take advantage of the improving sky conditions. Fortunately there will be several interesting objects to observe.

On the evenings of September 6 and 7, look to the west after sunset. There you will find an interesting grouping of the crescent Moon, Jupiter, Venus and Spica (the brightest star in Virgo). It should be a beautiful sight. On the night of September 17-18, the Full Moon is the Harvest Moon.

Look overhead and a little to the western sky and you'll get a good look at the Milky Way. In a dark sky location you will see a wispy stream of stars that begins in the constellation Cygnus and continues towards the western horizon. Hazy skies most of this summer have prevented us from viewing many of the interesting objects throughout this region of the sky. Grab your binoculars and telescopes and simply pan down that river of stars. You'll encounter many star clouds and nebulae.

Two distant planets will be visible during September as well. Uranus will be in the constellation Aquarius, whereas Neptune will be in Capricornus. Only a medium-sized telescope will show their true nature. Both appear like little blue-green marbles. Because they are so distant and they are gas giants, no detail can be discerned on these far off worlds. Regardless, if you visit Seagrave Memorial Observatory within the next two months, our members will be able to show them to you.

And last but not least, during mid-September at around midnight, Mars will be almost 30 degrees above the eastern horizon. If you have a telescope, begin watching Mars as he comes closer and closer to the Earth. Closest approach is on October 29-30, when the planet will be 43,137,588 miles distant. This close approach will not be as good as it was back on August 27, 2003 (34,646,418 miles, when we had absolutely incredible detailed views of it), but this time Mars

will be about 30 degrees higher in the sky, taking it out of the often soupy haze nearer to the horizon.

We will not be able to observe our celestial neighbor from Seagrave at a reasonable hour for another month or so due to the tree line to our east. I will be writing a Mars Observing Guide to be published sometime during the middle to late October. Though Seagrave Observatory is open to the public every clear Saturday night, when Mars finally gets high enough we will focus our attention and telescopes on the wealth of detail he will present during this close encounter. Watch this publication for details.

And finally, the Autumnal equinox (Fall, my favorite season), occurs at 6:23 pm EDT on the 22nd. On this date the Sun stands directly over the Earth's equator on its way towards the southern hemisphere. You know what that means...Winter won't be far behind!

Keep your eyes to the skies.

PS. Unfortunately the Perseid curse still persists, at least for us here in southern New England. The heat and high humidity during the peak of the Perseid meteor shower conspired on August 11-12 and 12-13 with thick haze, low clouds, and fog on the coast. On the first night the haze was very dense early in the evening. At midnight the conditions had not changed. At 3:00 am when I stepped out onto my porch I was surprised to see Mars visible to the east. Even the Great Square of Pegasus was visible just south of the zenith (a point directly overhead). As I became dark adapted that was all I could see. Immediately I saw one Perseid meteor zoom to the southeast below Mars. But that was it! Soon the haze and low clouds obscured even the bright stars of Pegasus, and then Mars disappeared from view as well. I thought maybe we would get lucky

the next night.

I thought wrong. The conspiracy continued, for the next night was just as bad. Before midnight no stars were visible. Once again I stepped out at 3:00 am to give the Perseids another try. For a second or two in the western sky I could see the summer triangle, a stellar asterism formed by the bright stars Deneb, Vega and Altair. Then they disappeared as though someone had pulled a gauzy curtain over them. Mars couldn't be seen at all in the east that morning. And needless to say, I didn't observe a single meteor!!

I would normally say better luck next year, but the Perseid meteor shower will peak on the night of August 12-13 in 2006, and the almost last quarter Moon will spoil the view. Not a total loss, but not the best observing conditions one could hope for.

Skyscrapers Gallery



Left: composite photo of moonrise over Chatam, Massachusetts on July 22, 2005. Right: Venus and Moon, August 8, 2005 from Oxford, Massachusetts. Photos by John Kocur.

Stellafane 2005

August 6, 2005



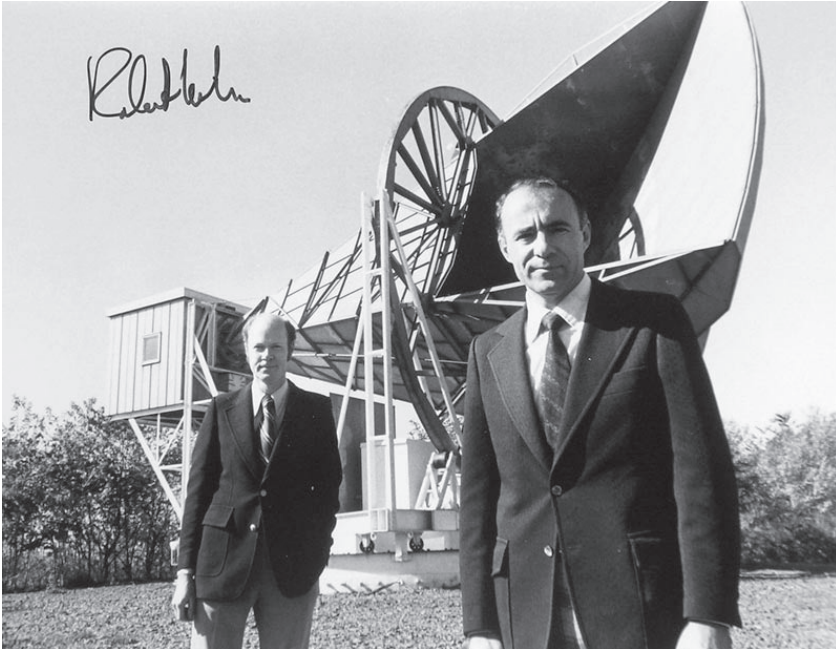
Left/Center: Bob Horton entered his 8" reflector at the 2005 Stellafane telescope makers convention in Springfield, Vermont on August 6. Right: Dick Parker shows his 6" refractor at Stellafane. Photos by Ken Dore.



On the way to Stellafane, Dan Lorraine made a side-trip to the final resting place of Christa McAuliffe in Concord, NH. Left to right: Jim Hendrickson, Tracey Halley, Ken Dore, Dolores Rinaldi. Inset top: Engraving at the top of McAuliffe's grave stone showing the shuttle and seven stars - one for each astronaut killed in the tragic explosion of the Challenger. Photo by Dan Lorraine.

August Meeting with Robert Wilson

August 11, 2005



Top left: Dr. Robert Wilson (left) and Dr. Arno Penzias (right) in front of the historic radio telescope that changed the worlds view on the origin of the universe. Bottom left: Dr. Wilson explains how a mere 2 grams per cubic centimeter difference in density just after the big bang would have had a significant different in the outcome of the universe. Photo by Marian Juskuv. Top right: The reception for Dr. Robert Wilson at Seagrave Memorial Observatory. Photo by Marian Juskuv. Center right: Dr. Robert Wilson and Steve Hubbard at the Alvan Clark refractor. Photo by Glenn Jackson. Bottom right: Dr. Robert Wilson and Richard Lynch. Photo by Marian Juskuv.

Presidents' Tour of Historical Astronomical and Literary Sites of Providence's East Side 2005

August 20, 2005



Top left: Brown University's Ladd Observatory, Providence Rhode Island. Constructed in the late 1890's, it houses a 12" Brashear refractor on a Warner & Swasey mount. Top right: Frank Seagrave's house on Benefit Street. Center right: Final resting place in Swan Point Cemetery for Dr. Charles Smiley of Brown University, one of the founding fathers of Skyscrapers in 1932. Bottom left: Skyscrapers members stand around the memorial for Frank Seagrave and his parents at Swan Point Cemetery. Bottom right: Past President Brian Magaw's final resting place at Swan Point Cemetery. Photos by Dan Lorraine.

Secretary's Report

Joel Cohen, Secretary

Monthly Meeting

August 11, 2005

Skyscrapers Meeting Hall North Scituate, RI

Meeting Start - Called to order by Dave Huestis, President, 7:30 p.m.

Secretary's Report - accepted as published

Treasurer's Report - accepted as read and posted

Trustee's Report - Jack Szelka noted that Ken Dore has donated a computer to operate and control the 16" Meade. Jack called for volunteers to man a work/clean up party before Astro Assembly, details to follow. Jack also suggested the use of a shredder to facilitate the clean up and both Tracey Haley and Jeff Jeffrey offered the use of their equipment.

Upcoming Speakers - Glenn Jackson announced the following speakers: September, Marcia Bartusziak, October, Astro Assembly, November, Howard Chun, and December, Dr. Barbara Welther.

Librarian's Report - Thanks to Ken Dore for the donation of Rukl's Atlas of the Moon and also to Dan Lorraine, the Librarian for the donation of two pair of Meade Binoculars.

Historian's Report - Dave Huestis reminded those in attendance of the upcoming President's Walking Tour in Providence to visit H.P. Lovecraft's home, the home of Frank Seagrave, their burial places and the street marking the Transit of Venus.

Astro Assembly - Ted announced that 50% of the tickets for Astro Assembly have been sold. Ted also announced that he has negotiated additional parking areas with

neighbors on Peeptoad Road. Ted also asked for volunteers to cover specific chores at Astro Assembly, the sign up board is in the front of the Meeting Hall.

New Business - The following membership applications were received: John Wilmot, Richard Brinegar, Dick Worrell, and Paula Carmichael.

Old Business - none

Good of the Organization - Dave mentioned the Perseid meteor shower whose peak will actually fall during daylight hours. Ted Ferneza mentioned that the Feinstein Camp needed some additional volunteers to help the Scouts view the night sky. Dave Huestis thanked Gerald Kimber White for contributing the fine article on the Alan Bean dinner to the Skyscraper.

Adjournment - 7:45 p.m.

Following adjournment, refreshments were served outside on the lawn under the new canopy.

The Skyscrapers, Inc., were proud to present the featured speaker for the evening, Nobel Laureate, Dr. Robert Wilson. Dr. Wilson is currently a Senior Scientist at the Smithsonian Astrophysical Observatory and Technical Leader of the Sub Millimeter Array, a new 8 element synthesis radio telescope under construction near the summit on Mauna Kea, Hawaii. The telescope is a combined effort of the SCA and ASIAA. Dr. Wilson is best known as co-discoverer of the 3 degree Cosmic Microwave Background Radiation thought to have originated in the early stages of the formation of the universe.

Dr. Wilson spoke of the Development of Cosmology in the 20th Century and entertained us with anecdotal remarks surrounding the proving of the data of the discovery and the timing of the announcement.

Directions to Seagrave Memorial Observatory

From the Providence area:

Take Rt. 6 West to Interstate 295 in Johnston and proceed west on Rt. 6 to Scituate. In Scituate bear right off Rt. 6 onto Rt. 101. Turn right onto Rt. 116 North. Peeptoad Road is the first left off Rt. 116.

From Coventry/West Warwick area:

Take Rt. 116 North. Peeptoad Road is the first left after crossing Rt. 101.

From Southern Rhode Island:

Take Interstate 95 North. Exit onto Interstate 295 North in Warwick (left exit.) Exit to Rt. 6 West in Johnston. Bear right off Rt. 6 onto Rt. 101. Turn right on Rt. 116. Peeptoad Road is the first left off Rt. 116.

From Northern Rhode Island:

Take Rt. 116 South. Follow Rt. 116 thru Greenville. Turn left at Knight's Farm intersection (Rt. 116 turns left) and follow Rt. 116. Watch for Peeptoad Road on the right.

From Connecticut:

- Take Rt. 44 East to Greenville and turn right on Rt. 116 South. Turn left at Knight's Farm intersection (Rt. 116 turn left) and follow Rt. 116. Watch for Peeptoad Road on the right.
- Take Rt. 6 East toward Rhode Island; bear left on Rt. 101 East and continue to intersection with Rt. 116. Turn left; Peeptoad Road is the first left off Rt. 116.

From Massachusetts:

Take Interstate 295 South (off Interstate 95 in Attleboro.) Exit onto Rt. 6 West in Johnston. Bear right off Rt. 6 onto Rt. 101. Turn right on Rt. 116. Peeptoad Road is the first left off Rt. 116.



47 PEEPTOAD ROAD
NORTH SCITUATE, RI 02857