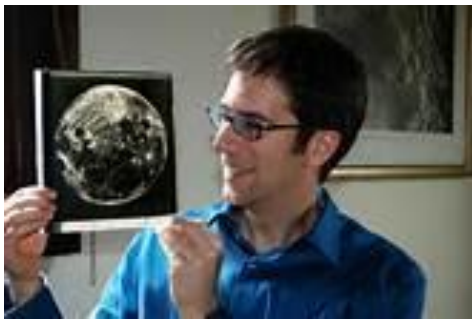


Program Schedule for Friday & Saturday Sept. 27-28, 2013

Time	Activity	Details	Presenter/ Sponsor	Location	Notes
6:00 PM to sunset	Solar (Sun) Viewing	Visitors will be able to look through solar filtered telescopes at the sun and possibly sunspots and solar prominences. (NEVER look directly into the Sun either naked eye or through a telescope without using an approved solar filter).	All Clubs	At Telescopes with Yellow Balloons	Clear skies only
6pm – Ongoing	Astronomy eqpt., books, etc	Astronomy related items available for purchase	Great Red Spot Astronomy Products, Wood Wonders, & D'Jar Meteorites	Pavilion	Cloudy or clear
6:20 pm- 10 pm Every 20 min	Night Sky Planetarium Presentation	The night sky simulation tours the constellations for the current evening sky using a portable planetarium. Free tickets available for each time slot at the Michigan Science Center vendor table. (Audience size limits)	The Michigan Science Center: Starlab Portable Planetarium	Dome under pavilion	Cloudy or clear
6 pm Ongoing every 20-30 minutes	Various Astronomy Movies	Short professional quality video vignettes on astronomy, space exploration, and NASA missions. The Metropark Trailer is located near the Parking lot and accommodates small groups.	Kensington Metropark	Mobile Learning Center Trailer	Cloudy or clear
6:15 PM	Comet Talk / Comet Making Demonstration	Learn about these special celestial visitors and what a comet is made up of by watching how a comet can be made from dry ice and common household ingredients. Extremely family friendly.	Mike Broughton - Kensington Metropark Nature Center Interpreter	Tent	Cloudy or clear
6:45 PM	The Rescue of Andromeda	Discover the Greek hero within us all, and story behind several fall constellations, as you witness the rescue of the Princess Andromeda. Youth volunteers from the audience will act out the scenes from ancient mythology. Bring your camera. There are no rehearsals, we just jump in and have fun.	Mike Broughton - Kensington Metropark Nature Center	Tent	Cloudy or clear
7:30 PM	Oh What a Spin We're In!	We show how cold space can get through a series of fast moving demonstrations using liquid nitrogen and everyday common objects. Our most popular session for all ages. In addition, the wonders of angular momentum will be demonstrated with an actual "Fire Tornado".	Jeff Conn - Wayne State University - Dept. of Physics & Astronomy	Tent	Cloudy or clear
8:15 PM	Losing the Dark	Why can't you see very many stars from your neighborhood? Learn about how light pollution is making it harder to see stars and other astronomical objects, and what you can do to help reverse the trend.	Norbert Vance - Professor at EMU	Tent	Cloudy or clear
8:40 PM	3D Tour of the Solar System	Beginning with the Moon and the planets, and ending in the infinite reaches of intergalactic space, this short 3D movie is sure to please.	Dave D'Onofrio – Warren Astronomical Society	Tent	Cloudy or clear
9:00 PM	Keynote Speaker, "You are Here"	Rocket through space and sail among billions of stars and galaxies making stops at our Moon and planets. Then accelerate to light speed and head into interstellar space and see all the galaxies.	Dean Regas – Cincinnati Observatory & Co-host of PBS "Star Gazers" TV Show	Tent	Cloudy or clear
10:00 PM	Tour of the Constellations	Want to learn how to find your way around the night sky? If it is clear, you can locate the major summer constellations from this tour of the night sky and hear the mythology stories of the ancients who named them.	Diane Hall – Warren Astronomical Society Shannon Murphy – EMU & SAS	On the sidewalk at the Beach	Clear skies only
Dusk-10:30	Skytour Scavenger Hunt	Using a worksheet, children move around our telescopes and binoculars to view the moon, planet(s), nebulas, star clusters and galaxies. Upon completion, a prize is awarded for ages 3 to 17 yrs.	Work sheets & Prizes for completion at club tables-Pavilion	At Telescopes	Cloudy or clear
Dusk-12:00	General Viewing	An opportunity to look through any of the telescopes: We expect to be able to see the Uranus, Neptune, and a great number of other fascinating objects such as galaxies, double stars, nebulas, and star clusters.	All Clubs	At Telescopes	Clear skies only

Everyone from GLAAC hopes to see you next year at AATB on Sept 28th & 29th, 2014.



Dean Regas is an astronomy enthusiast of the highest order. He started with an education degree from Xavier University, first taking visitors on tours of the constellations at Cincinnati's Wolff Planetarium, and then

became Outreach Astronomer for the Cincinnati Observatory in 2000. He continues to be a NASA Solar System Ambassador. His award winning articles have appeared in "Sky and Telescope" and "Astronomy" magazines, CET Connect and the Huffington Post on the internet. He frequents TV and radio shows as the astronomy expert and myth buster, and has co-hosted Jack Horkheimer's "Star Gazers" astronomy feature on PBS worldwide for the last 2 years. An avid amateur astronomer himself, you may have heard him talking about chasing eclipses on NPR's Science Friday last fall.

Astronomy at the Beach is Financially Underwritten

by: Camera Mart ▪ Co-Op Services Credit Union ▪ The Cranbrook Institute of Science ▪ The Eastern Michigan University Planetarium ▪ Eaton Corporation ▪ The Ford Amateur Astronomy Club ▪ The Great Red Spot Astronomy Products ▪ the Huron-Clinton Kensington Metropark ▪ LaFontaine Automotive Group (Highland) ▪ The Michigan Science Center ▪ RIIS: Research into Internet Systems ▪ The Seven Ponds Astronomy Club ▪ The University of Michigan Dearborn ▪ The University of Michigan Museum of Natural History ▪ The University of Michigan Student Astronomical Society ▪ The University Lowbrow Astronomers ▪ Varsity Lincoln of Novi ▪ The Warren Astronomical Society ▪ Wayne State University.

**This program provided by a donation from
Jack and Cecelia Brisbin.**

GLAAC & Kensington Metropark Welcome You to The 17th Annual Astronomy at the Beach



Who We Are: GLAAC (*Great Lakes Association of Astronomy Clubs*) is a loose association of amateur Astronomy Clubs in Southeastern Michigan who band together each year to provide an enjoyable, family oriented activity that focuses on our hobby, Astronomy and Space Sciences. Our primary aim is to have fun by learning about Astronomy and Space Sciences, educating others through talks and star parties, and sharing our resources with others who share our interest, including local schools, scouts, and other organizations. We are made up of:

[The Astronomy Club at Eastern Michigan University:](http://emu.collegiatelink.net/organization/astronomy-club-at-eastern-michigan-university) emu.collegiatelink.net/organization/astronomy-club-at-eastern-michigan-university

[The Ford Amateur Astronomy Club:](http://www.fordastronomyclub.com) www.fordastronomyclub.com

[The Oakland Astronomy Club:](http://oaklandastronomy.org) oaklandastronomy.org

[The Seven Ponds Astronomy Club:](http://bhmich.com/sevenpondsac) bhmich.com/sevenpondsac

[The Sunset Astronomical Society:](http://sunsetastronomicalsociety.com) sunsetastronomicalsociety.com

[The University of Michigan Student Astronomical Society:](http://umichsas.com) umichsas.com

[The University Lowbrow Astronomers:](http://umich.edu/~lowbrows) umich.edu/~lowbrows

[The Warren Astronomical Society:](http://warrenastro.org) warrenastro.org