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ake Afton Public Observatory

OR:	Immediate Release
FROM:	Lake Afton Public Observatory WSU Fairmount Center for Science and Mathematics Education Robert Henry, 316.978.3991 or Greg Novacek, 316.978.3854
DATE:	December 16, 2013
RE:	Lake Afton Public Observatory – New programs for winter, 2014.

Stellar Secrets and Planetary Voyages

Have you ever wondered how astronomers find out how hot, massive or big a star is or what it's made of? It's not like they can just take a sample or stick a thermometer in a star. To find out how they do it, visit the Lake Afton Public Observatory for "*Discovering Stellar Secrets*". Look through the Observatory's big telescope at a gas giant planet, the spectrum of a bright star, a multiple star system, clusters of stars, and glowing clouds of gas as the staff discusses how the secrets of stars are revealed. "*Discovering Stellar Secrets*" will be presented on the following evenings: January 3-4, 17-18, 24-25, 31; February 1, 21-22, 28; March 1, 21-22, and 28-29.

The Observatory also presents "Voyage through the Solar System". Using the Observatory's big telescope, visitors will journey through our solar system as we commemorate the 35th anniversary of the Voyager spacecraft's fly-by of Jupiter. Our first stop will be the Moon, then we will visit Jupiter, and then on to Uranus (through February 15). "Voyage through the Solar System" will be presented on the following evenings: January 10-11; February 7-8, 14-15; March 7-8 and 14-15.

The Observatory has numerous exhibits that complement their observing programs. Some explain how astronomers learn about the temperature, and composition of stars. Other exhibits show the many interesting features of Jupiter; the discoveries of the early missions to the outermost planets of our solar system; and how astronomers use different portions of the electromagnetic spectrum from radio waves to ultraviolet light and x-rays to learn about celestial objects. At other exhibits, you can make a telescope, or test your astronomy knowledge to try to launch the Space Shuttle. You can also use small telescopes and binoculars outside to observe astronomical objects on your own.

Lake Afton Public Observatory January 2, 2013 Page 2 of 3

The Observatory also features a photography program each month where anyone with a 35mm single-lens reflex camera (that's a camera with a removable lens) can take celestial photographs using the Observatory's telescope as a giant telephoto lens. At 10:00 p.m. on Saturday, January 25th and again on Saturday, February 22nd, the photography program will feature one of the most beautiful objects in the galaxy, M42, better known as the Orion Nebula. Then, on Saturday, March 1st at 10:00 p.m. the astrophotography program will focus on the largest planet in our solar system, Jupiter.

Please note that for these astrophotography programs your SLR camera must have a manual override and you should be familiar with using its manual settings such as changing ISO settings and exposure times. For photographing bright planetary objects like Jupiter, you will need an ISO setting of 400 or 800 and a cable release is recommended. For deep sky objects like the Orion Nebula, an ISO setting of 800 or faster will be needed and a cable release is necessary.

But wait! What if you don't have a 35mm SLR camera? We have a solution ... jut bring a USB flash drive with you to the Observatory. The Observatory staff will help you use the Observatory's digital SLR camera to take your pictures. Your pictures will then be transferred to your flash drive for you to take home, process and print.

Opening Times and Admission

The Lake Afton Public Observatory is open to the public on Friday and Saturday evenings. From January 2nd through March 1st, Observatory hours are from 7:30-10:00 p.m.; and from March 2nd through the 31st, Observatory hours are from 8:00 to 10:00 p.m. Admission to the Observatory is \$5 for adults and \$3 for children ages 6-12; children under 6 are admitted free. We also have a special family rate where 2 adults and their immediate children or grandchildren get in for just \$15.00. For program information, you can "friend" the Lake Afton Public Observatory on Facebook, call the information hotline at WSU-STAR (978-7827), or go to the Observatory's website at http://webs.wichita.edu/lapo

Location

The observatory is located about 20 miles southwest of downtown Wichita on MacArthur Road at 247th Street West in Lake Afton County Park. It is immediately north of the lake, just off MacArthur Road. Lake Afton can be reached by any of the following routes: west from Wichita on U.S. 54 to the Lake Afton sign at Viola Road three miles past Goddard, then three miles south and one mile east; or southwest on K-42, 7 miles to Schulte and nine miles west on MacArthur.

Events Taking Place in the Sky

Would you like to know when full moon will occur? Have you ever pondered the name of the bright star you saw near the moon? Is there a meteor shower this month? To discover the answers to these questions or if you just want to know what events are taking place in the sky during the current month call the Observatory's Program and Sky Information line at WSU-STAR (978-7827).

The Lake Afton Public Observatory is operated by the Fairmount Center for Science and Mathematics Education, a part of the Fairmount College of Liberal Arts and Science at Wichita State University.

Lake Afton Public Observatory Public Program Schedule January 2 – March 29, 2014

Program	January	Fridays and Saturdays
Discovering Stellar Secrets	7:30 – 10:00 p.m.	January 3-4, 17-18, 24-25, 31
Voyage through the Solar System	7:30 – 10:00 p.m.	January 10-11
Photography: Orion Nebula (M42)	10:00 p.m.	Saturday, January 25
Program	February	Fridays and Saturdays
Discovering Stellar Secrets	7:30 – 10:00 p.m.	February 1, 21-22, 28
Voyage through the Solar System	7:30 – 10:00 p.m.	February 7-8, 14-15
Photography: Orion nebula	10:00 p.m.	Saturday, February 22
Program	March	Fridays and Saturdays
Photography: Jupiter	10:00 p.m.	Saturday, March 1
Discovering Stellar Secrets	8:00 – 10:00 p.m.	March 1, 21-22, 28-29
Voyage through the Solar System	8:00 – 10:00 p.m.	March 7-8, 14-15

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