

# **KOPERNIK OBSERVATORY** & SCIENCE CENTER

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## Winter 2015-16 Public Program Schedule

Adults: \$5; Seniors/students: \$3; Family: \$16 maximum; Kopernik Members: Free Admission Please note times for each event! Doors open 30 minutes prior to program.

#### Friday, December 4: Comets: Tales, Tails & Origins – David Jenkins, Binghamton University 7 p.m.

Ever wonder what comets are made of and why these vagabonds of the solar system develop tails? This talk will give an overview of the orbits, physical features, and development of comets as they move through our solar system. The most recent studies on comets have brought up new questions about how these odd snow balls formed. If clear, see Uranus. Neptune, the Andromeda galaxy, and other deep-sky wonders!

#### Friday, December 11 & 18: Star of Bethlehem Movie 7 p.m.

Kopernik has been granted special permission to show the thought-provoking movie Star of Bethlehem. An unusual star is claimed to have appeared in the sky at the time of the birth of Jesus of Nazareth. This movie is an investigation into the story found in the Biblical Gospel of Matthew about this 'Star of Bethlehem.' It includes the words of Roman and Jewish historians alongside those of ancient prophets. Come learn about this ancient mystery and draw your own conclusions. If clear, see the stars over Vestal and other celestial objects through Kopernik's telescopes. If clear, see the Plejades star cluster, first-quarter Moon (December 18), Uranus, Neptune, Orion Nebula and other deep-sky objects.

### Sunday, December 13: CLEAR ONLY - Geminid Meteor Shower Viewing

8 p.m. till sunrise The Geminid meteor shower will peak after midnight on December 13, into the early morning hours of December 14. If skies are clear, Kopernik will stay open all night for viewing. Meteor activity will start around 9 or 10 p.m. giving young viewers an opportunity to see a shooting star! Dress warm and bring a sleeping bag and lounge chair! For those who want to warm up or pass time indoors waiting for peak meteor activity, the classic Sci-Fi movie It Came from Outer Space will be shown in its original 3D format, starting at 9 p.m.

Check www.kopernik.org or call after 5 p.m. for sky conditions.

The website will be updated frequently to provide information about sky conditions and meteor shower activity.

#### Monday-Wednesday, December 28-30: CLEAR ONLY – Deep-Sky Observing Sessions 6 – 9 p.m.

Head to Kopernik for informal observing sessions. Cold, moonless skies will make these nights ideal for observing some of the dimmer winter sky objects. See the Orion nebula, Andromeda and Whirlpool galaxies, and other deep-sky objects. Check www.kopernik.org or call after 2 p.m. for sky conditions.

#### Friday, January 15 & February 12, 2016: Winter Skies

Learn how to identify constellations and planets in the winter sky, and how to spot the International Space Station. Free star maps will be provided. If you have your own telescope, bring it with you and a Kopernik Astronomical Society member will help you learn how to assemble it and use it. Although it is cold, winter is one of the best times to view planets and stars, so head up to Kopernik, away from the city lights! If clear, see a first-quarter Moon, star clusters and double stars!

### Saturday, February 20, 2016: Winter Star Party – Celebrating Mikołaj Kopernik's Birthday! 6 p.m.

A star party is a gathering of amateur astronomers for the purpose of observing the sky. Kopernik's annual Winter Star Party tradition continues this year and you are invited! Stay warm inside and hear speakers on various astronomy topics or brave the cold and see winter constellations, along with the Moon, Jupiter, the Orion Nebula, and much more through Kopernik's powerful telescopes. See www.kopernik.org for details. At the end of the presentations, celebrate Mikołaj Kopernik's birthday (February 19, 1473) with cake. If clear, see a nearly full moon, star clusters, and Jupiter after 9 p.m.

Kopernik's main building is heated but the observatories (telescope buildings) and great outdoors are not! Be sure to dress warm for winter observing! Coffee, tea, and hot chocolate are available for purchase in the main building.



See www.kopernik.org for a detailed Public Program schedule.



#### 7 p.m.