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Winter Star Party

Is Astronomy really better in the Winter? Find out what happened this past year in the world of astronomy. Learn about meteors and meteor showers and learn about dark matter theories and how they affect our understanding of the Universe.

Saturday, January 28, 2012

5:30 PM: **Kopernik Observatory Members-Only Reception** (coffee & donuts provided)

6:00 PM: **Astronomy: The Year in Review**

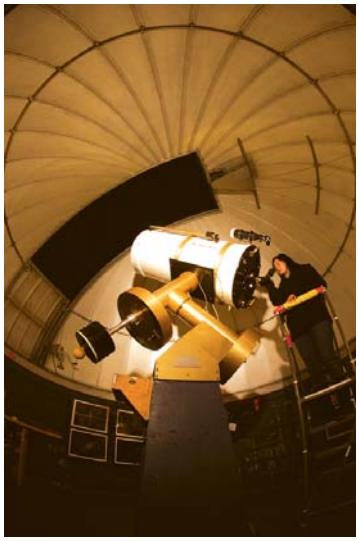
7:00 PM: **Meteorites**

8:00 PM **Dark Matter Halos: Discrepancy Between Simulations & Observations**

Our understanding of the Universe continues to expand almost as rapidly as the Universe itself. Dr. Nicholas Guydosh of the Kopernik Observatory & Science Center will present a "Year in Review" of some of the latest Astronomical discoveries and images.

An estimated 500 meteorites reach the Earth's surface each year. These visitors from space bring with them a wealth of knowledge from our solar system. Patrick Manley, of the Kopernik Astronomical Society, will display his meteorite collection for viewing. Come join us to learn about meteorites, their origins, what they are made of, what wonderful secrets they hide inside. Discussions will cover the basics of identification of meteorites and meteor-wrongs as well as meteorite hunting practices. Please feel free to bring in your suspected finds for a brief visual assessment.

Many discrepancies exist between simulations of dark matter halos and observations of galaxies. Betsey Adams, a PhD candidate at Cornell University, will present some of her current research which involves finding the lowest mass, gas-rich, galaxies using data taken at the Arecibo Observatory in Puerto Rico. One of the most well known discrepancies is the mismatch in the number of dark matter halos versus galaxies. In order to reconcile the discrepancies many solutions have been proposed; from a loss of the luminous matter from the dark matter halos to a modification of dark matter. Various solutions will be discussed revealing the current consensus.



After the programs, if it is clear, view Venus, Jupiter, the Moon, the Orion Nebula, double stars and a multitude of deep-sky objects through Kopernik's powerful telescopes. When you need to warm up you can come back inside our warm building and visit our computer room to run night sky simulation software and build a 3D glow-in-the dark constellation. See on-going demonstrations of our 3D imaging Geowall and Ham Radio Satellite Station.

Admission:
Kopernik Members: Free
$5.00 adults
$3.00 students/seniors
$16.00 family maximum.

For information call (607) 748-3685 or visit www.kopernik.org