

Upcoming Astronomical Horizons Lectures All lectures are free to the public and given at Abrams Planetarium, starting at 7:30pm

March 21, 2013: Comets: Icy Wayfarers from the Outer Solar System

Professor Ed Brown

Close to the sun, a comet can be one of the most spectacular objects in the solar system, with tails of gas and dust stretching for tens of millions of miles. Far from the sun, the comet may exist only as a small dirty snowball, a few miles across. This talk will explore how these dirty snowballs can transform into spectacular sights as they near the sun and how they inform us about the history of the solar system. Intriguingly, there is a possibility that two comets in 2013 may become bright enough to be visible to the naked eye, but, as of February, nobody knows for sure how bright either will become. The first of these comets, Comet PANSTARRS, will have arrived in our evening skies by mid-March. The second, Comet ISON, is expected toward the end of the year. Will they shine or fizzle?



The nucleus of Comet Tempel 1 and the Tails of Comet Hale-Bopp

April 18, 2013: The Multitude of Planets Beyond our Solar System

Professor Horace Smith

It was not long ago that we knew only of the planets within our own solar system. Today the study of exoplanets, planets around suns beyond our own, is one of the most rapidly advancing in all of astronomy. As new and improved techniques for finding these worlds come into operation, scarcely a day passes without the discovery of some new and strange planet around a distant star. Are some of these other planets similar to our own Earth? How can we search for life on planets light years away?



Artist's conception of a giant exoplanet with an earth-sized moon.

CAMPUS OBSERVATORY PUBLIC VIEWING NIGHTS

The MSU Campus Observatory opens its doors to the public two nights per month from spring through fall, *weather permitting*. This is your chance to look at planets, star clusters, and other beautiful celestial objects using the 24-inch telescope and also a number of smaller telescopes. Knowledgeable professional and amateur astronomers will be on hand. But come only if the sky is clear, and dress warmly. For a map, see www.pa.msu.edu/astro/observ.

MSU Campus Observatory Open House

Weather permitting, there will be public observing from 9-11pm on Friday and Saturday, April 19 and 20.



