



After Dark

MSU's Astronomy Newsletter

October 2010: No. 42

Upcoming Astronomical Horizons Lectures

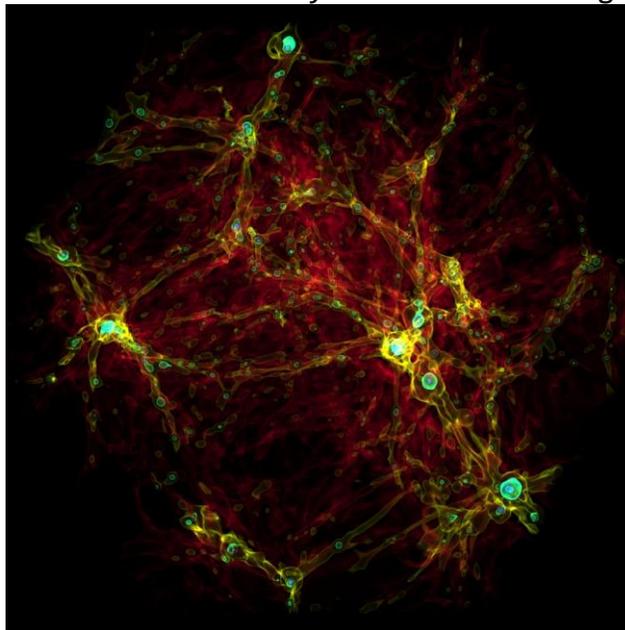
All lectures are free to the public and given at Abrams Planetarium, starting at 7:30pm

October 28: MARS METEORITES: ROCK MESSENGERS FROM THE RED PLANET
Professor Michael Velbel

We are used to seeing pictures of Mars rocks taken by robotic explorers of the Red Planet, such as the Martian rovers Opportunity and Spirit. However, no mission to Mars has yet returned with a rock sample. Nonetheless, nature has supplied us with rocks in the form of meteorites that seem to have originated on Mars.

November 18: STRUCTURE FORMATION IN THE UNIVERSE: FROM THE BIG BANG TO TODAY
Dr. Britton Smith

The universe today is clumpy, with galaxies and galaxy clusters separated by voids of more empty space. Was the universe always so clumpy? How have structures formed and evolved throughout the almost 14 billion years since the Big Bang?



A simulation of the large scale structure of the universe.

January 20: THE UNIVERSE'S LARGEST GALAXIES
Professor Mark Voit

Our Milky Way Galaxy is bigger than many, dwarfing systems such as the Magellanic Clouds. It is, however, by no means the largest galaxy. There exist galaxies far larger than our own. How big are those galaxies and how were they formed?

February 24: NEW WORLDS
Professor Ed Brown

The number and variety of planets known to exist beyond our own solar system swell with each passing year. We now know of Jupiter-like planets with boiling hot surfaces, stellar systems orbited by multiple planets, and planets that may fall in the "Goldilocks" zone where life could possibly exist. The latest discoveries in this rapidly changing field will be presented.

March 24: THE FIRST YEAR OF THE SPARTAN INFRARED CAMERA
Professor Ed Loh

Built at Michigan State University, the Spartan Infrared Camera allows the SOAR telescope in Chile to peer into the universe at infrared wavelengths. The Spartan camera has now been in operation for a year. What has it discovered?

April 21: CLUSTERS OF GALAXIES: LEVIATHANS OF DEEP SPACE
Dr. Amalia Hicks

Galaxies do not just come in ones or two's. Sometimes they occur in groups that contain tens, hundreds, and even thousands of galaxies. What do we know about galaxy clusters and how they were formed?

CAMPUS OBSERVATORY PUBLIC VIEWING NIGHTS

The MSU Campus Observatory opens its doors to the public two nights per month, *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**

The last public observing nights of the fall semester will be held Friday and Saturday, Oct. 15 and 16, from 9-11pm. Open houses will halt for the winter, but will resume in the spring.

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