

# LOWELL REGIONAL PHYSICS ALLIANCE

*Thursday, November 12, at 3:00pm*

*UMass Lowell*

## *The Interstellar Boundary EXplorer (IBEX): Exploring the Edge of the Solar System*

**Dr. Harald Kucharek**, University of New Hampshire

The Interstellar Boundary EXplorer (IBEX) is a NASA satellite that will make the first map of the boundary between the Solar System and interstellar space. The mission is part of NASA's Small Explorer program. The IBEX satellite was launched Oct. 19, 2008. The nominal mission baseline duration will be two years to observe the entire solar system boundary.

**OVER**

*followed by*

## *Shared Demonstrations*

*Bring a physics demonstration in mechanics or optics and enter the demonstrators' raffle (special raffle items!). Demonstrations must take no more than FIVE minutes.*

---

<b>ROOM:</b>	<i>Olney Hall -218 (see <a href="http://www.uml.edu/maps/olney.htm">www.uml.edu/maps/olney.htm</a> for directions)</i>
<b>PARKING:</b>	<i>Parking permit for Riverside lot is enclosed</i>
<b>SCHEDULE:</b>	<i>3:00 Registration and Discussion</i>
	<i>3:45 "The Interstellar Boundary EXplorer (IBEX)..."</i>
	<i>4:45 Announcements and Raffle</i>
	<i>5:00 Shared Demonstrations</i>
	<i>6:00 Conclusion</i>
<b>INFORMATION</b>	<i>Art Mittler (978) 934-3775</i>
<b>&amp; ENQUIRIES:</b>	<i>Arthur_Mittler@uml.edu</i>

---

## *Abstract*

### **“The Interstellar Boundary EXplorer (IBEX): Exploring the Edge of Our Solar System”**

**Dr. Harald Kucharek**

The Interstellar Boundary EXplorer (IBEX) is a NASA satellite that will make the first map of the boundary between the Solar System and interstellar space. The mission is part of NASA's Small Explorer program. The IBEX satellite was launched on Oct. 19, 2008. The nominal mission baseline duration will be two years to observe the entire solar system boundary.

**Harald Kucharek** received his Ph.D. in physics at the Technische Universitaet Muenchen at the Department of Theoretical Physics. Thereafter, he joined the theory group as well as the experimental space plasma group at Max-Planck-Institut fur Extraterrestrische Physik (Germany). During that time he worked on science topics covering large-scale simulations of physical processes in collisionless space plasmas and in-situ observations in both the near-Earth region as well as in the heliosphere. In 2001 he joined the Experimental Space Plasma group at the Space Science Center at the University of New Hampshire, and is actively involved in current spacecraft missions such as SOHO, CLUSTER, ACE, Double Star, and IBEX.