



**NEW HAMPSHIRE  
ASTRONOMICAL  
SOCIETY**  
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nhastro.com

The New Hampshire Astronomical Society invites the public to a presentation on

## **Chasing Shadows for New Horizons**

### **The Worldwide Effort to Capture an Occultation of Ultima Thule (MU69)**

The presentation starts at 7:30pm, Friday, September 13 at the Goulet Science Center, Saint Anselm College, 100 St Anselm Dr, Manchester, NH. Admission is free.

#### **Summary**

Even before the New Horizons spacecraft arrived at Pluto in July of 2015, scientists at the Southwest Research Institute in Boulder, CO were looking for another "target of opportunity" farther out in the Kuiper Belt, on the assumption that the spacecraft survived its high-speed pass through the Pluto system. Years of searching by the Hubble Space Telescope identified several possible KBO targets but each had large uncertainties in orbital parameters. Luckily one of the target objects (2014 MU69) was projected to occult several stars in Sagittarius in the summer of 2019. Observing an occultation by the target object would greatly reduce the uncertainty in its location. With only 9 months to go before New Horizons would encounter the object, SwRI began planning expeditions to South Africa, Argentina and Colombia to observe the occultations and thus obtain more precisely its size and location. These missions were the largest and most complicated occultation deployments ever attempted. Several of us from IOTA (the International Occultation Timing Association) were invited to participate based on our previous experience with occultations. The team brought along 25 large telescopes (16" Skywatcher Go-To dobs in shipping crates), cameras, laptops, batteries and more than 50 people. Support was provided from the governments, police, military, local astronomy clubs and Universities in each country. My talk will review the excitement of the expeditions themselves as well as the results of the fly-by of the most distant object ever closely observed by mankind.

#### **About the speaker**



Ted Blank is a NASA/JPL Solar System Ambassador and former president of NHAS. He currently makes his home in Fountain Hills, Arizona where he continues a passion for sidewalk astronomy as well as serving on the board of the planned International Dark Sky Discovery Center in Fountain Hills.

## **About the Society**

The New Hampshire Astronomical Society is a wholly volunteer New Hampshire chartered non-profit educational organization dedicated to furthering public awareness of astronomy.

Membership is open to anyone with an interest in astronomy. The club can be a great source of learning for general astronomy, astrophotography, telescope making, and many other topics. Many of our members are very knowledgeable in optics, telescope building, CCD imaging, astrophotography, observing techniques, observatory construction, and cosmology. One need not own a telescope to join; "scoping out" equipment owned by the club and its members is an excellent way to determine what might be the best equipment for you. For more information on the society, visit [www.nhastro.com](http://www.nhastro.com)