

UWSP PHYSICS & ASTRONOMY COLLOQUIUM

FRIDAY, SEP. 20, 2013 at 2:00 P.M. in A-106 SCI

Refreshments will be served beginning at 1:45 p.m.

This past summer, UWSP student Tim Twohig participated in a Research Experience for Undergraduates (REU) program sponsored by the National Science Foundation. Two other UWSP students, Taylor Richards and Chris Voitula, did internships at local businesses. Please join us as Tim, Taylor, and Chris discuss their REU and internship experiences.

Tim Twohig: “The Effects of Sunlight Penetration and Weather on Stratification and Surface Temperature in Lake Michigan”



Research vessel on Lake Michigan

In recent decades, the surface temperatures of most of the Great Lakes have been increasing at a rate up to twice as fast as the rate of increase of the air temperature in the same areas. This has caused later ice formation and earlier ice breakup on Lake Michigan. Occurring at the same time as this accelerated warming is the invasion of the zebra and quagga mussels; filter feeders who eat phytoplankton in the water and thereby decrease the turbidity of the water. My project focused on the effect of this clearing of the water on the surface

temperature using absorption spectra to calculate the heat due to solar penetration and data gathered on Lake Michigan. This project suggested that turbidity in the water can have a large effect on the surface temperature, and clearing of lake water may be contributing to observed lake warming.

Taylor Richards and Chris Voitula: “Applied-Emphasis Internships: A Panel Discussion”

Moderator: Prof. Chris Verzani



Taylor Richards (left) and Chris Voitula

UWSP offers four versions of the physics major, two of which – namely, the physics major with applied mechanics emphasis and the physics major with applied electronics emphasis – have an internship component. In this panel discussion, we will share our experiences as interns, applying skills we have acquired in the major and picking up new skills on the job. One of us (Chris) did his internship this past summer at Donaldson Company, Inc., of Stevens Point, a leading worldwide provider of filtration systems. The other (Taylor) did two internships: one at Marten Machining of Stevens Point, a high precision machine shop, and the other at T.I.P. of Custer, an agricultural metal fabrication shop.

About the speakers:

Tim Twohig is a senior majoring in physics and minoring in chemistry.

Taylor Richards is a senior majoring in physics with applied mechanics emphasis and minoring in mathematics and business administration.

Chris Voitula is a senior majoring in physics with applied mechanics emphasis.