# PHYSICS & ASTRONOMY COLLOQUIUM UNIVERSITY OF WISCONSIN – STEVENS POINT

## FRIDAY, October 3, 2014 at 2:00 P.M. (Room A-106 SCI)

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

This past summer, UWSP student Erin Sullivan continued her research work (initiated in the Spring semester of 2014) in Dr. Palash Banerjee's lab. Another UWSP student, Michael Detert, worked as an intern at a local business in partial fulfillment of the requirements for the Physics Major with Applied Emphasis. Please join us as Erin and Michael discuss their exciting summer experiences.

Erin Sullivan: Laser Interferometry and Experiences as an Undergraduate in the Lab



#### Abstract:

I had the opportunity this past semester and summer to work with Dr. Palash Banerjee on his ongoing research at UW-Stevens Point. The primary focus of the work I did was developing new instruments to study the properties of small mechanical structures. This included building and controlling an interferometer to track minute changes in position, and designing an experiment to study the motion of tiny magnetic cantilevers when placed in an external magnetic field. In addition to the work inside the lab, there were also a couple opportunities to tour a manufacturing facility and to present this work at a conference at UW-Eau Claire. I will be discussing these experiences along with the results of our research.

Michael Detert: My Internship at Donaldson

#### **Abstract:**

This past summer I was given the opportunity to use the skills that I have acquired through the UWSP Applied Emphasis program and take part in an incredible internship at Donaldson Company right here in Stevens Point. Donaldson is a leading worldwide provider of filtration systems, mostly hydraulic and oil filters here in Stevens Point. I will discuss a few of the opportunities that I had throughout this internship and what new skills I have acquired there. I will also share a few of the different types of projects that I have been working on throughout the summer and what those jobs taught me.



### About the speakers:

**Erin Sullivan** is a senior majoring in Physics and Mathematics (minoring in Applied Mathematics). **Michael Detert** is a senior majoring in Physics and minoring in Biology.