



Source: Stephane Evoy, Lidija Sekaric, Dustin Carr.  
Department of Physics, Cornell University, 1999.

# **Atomic/Magnetic Force Microscopy**

## **Physics Seminar**

**February 8, 2012—1:30 PM, LL 121**

**Presented by Trevor Bowman,  
WSU Physics Major**

Force Microscopy is a type of Scanning Probe Microscopy that can be used to record probe-surface forces on the nanometer-scale. It is not limited to electromagnetic diffraction, thus it can be used to create images of very small objects with minimal sample preparation. The collected interaction data is processed to form several images that are viewed as topographic surface maps. The atomic force microscope at Weber State University can be equipped with different tips to image a specific type of surface force. Using magnetic CrCo coated tips images of nanometer-scale magnetic structures can be created.

Though a good tool for imaging on the nanometer-scale, Force Microscopy has limitations and drawbacks. Discussed will be a brief history of Force Microscopy, why it is used, its mechanics, and what has been done at WSU in Atomic and Magnetic Force Microscopy.

**Light refreshments will be served.**