

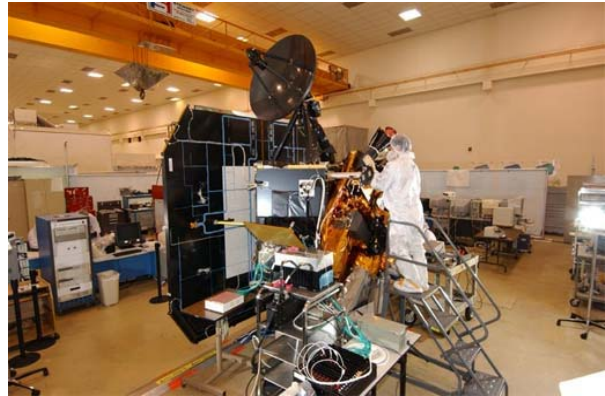
# Physics Seminar

## Deep Impact Mission

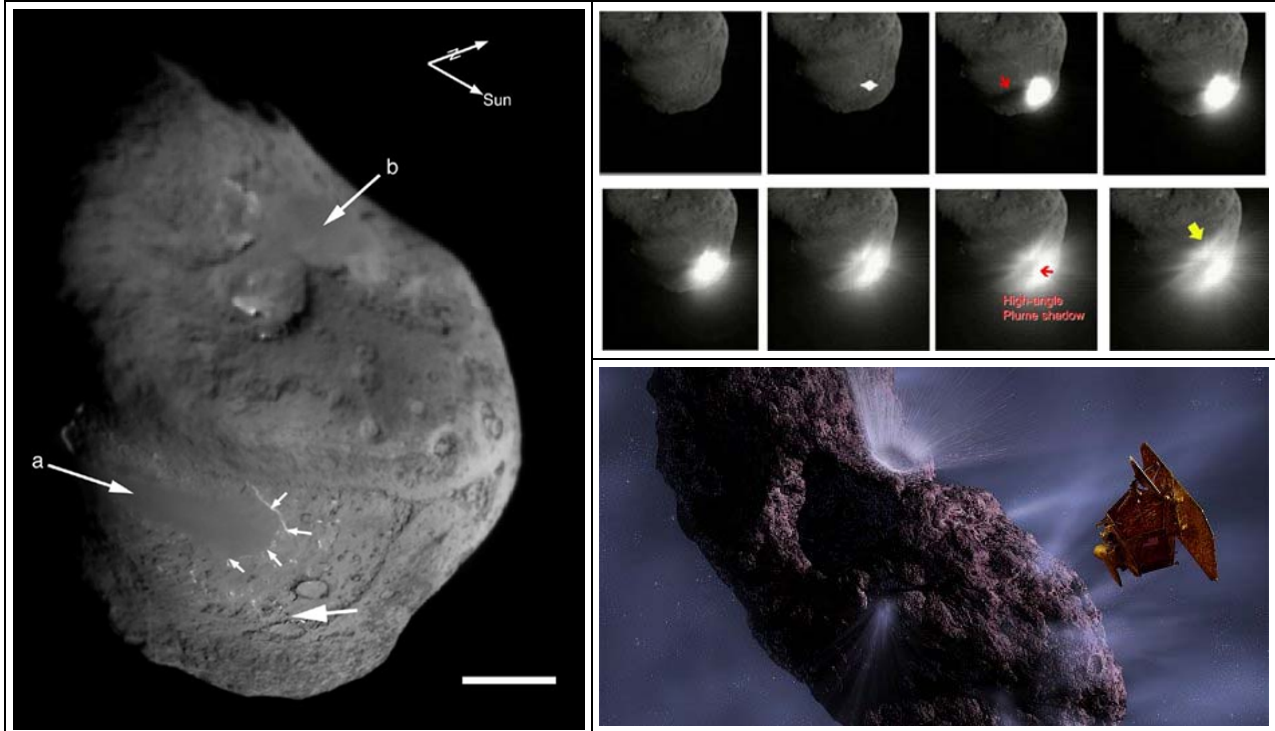
Wednesday 3/14/2007, 4:30pm  
Willet Science Center 101

**Rick J. Noel**

Ball Aerospace & Technology Corporation  
Robins Air Force base



A video presentation on the development and engineering leading up to the creation of the dual Deep Impact spacecraft will be presented, followed by a Q&A session. Deep Impact was a first ever, dual NASA space probe mission to impact, and image the impact, of comet Tempel 1. Many have compared it to "...hitting a speeding bullet, with a bullet, while photographing the results from another bullet." The purpose of the mission was to gather data on the internal composition of comet Tempel 1. Both spacecraft were launched on the same rocket on 12 Jan 2005 (there was a 5 second launch window to meet the comet rendezvous criteria). Comet Tempel 1 was successfully impacted by the impactor space probe on 4 July 2005, while the impact collision was imaged by the fly-by space probe. The impact energy was equivalent to 4.5 tons of TNT and created a crater believed to be up to 100 meters wide (larger than the bowl of the Roman Coliseum). The fly-by spacecraft successfully imaged the collision, downloaded all of the data, survived the debris field, and has been retargeted by NASA on 20 July 2005 to image the comet Boethin.



*Please join us for light refreshments at 4:15pm outside WSC 109.*