## **Kurt Lindstrom:**

**Overview of New Horizons** 

### Hal Weaver:

**Overview of the Science** 

### **Glen Fountain:**

**Overview of the Mission** 

### **Kurt Lindstrom:**

**Overview of the New Horizons DEIS** 

### **Kenneth Kumor:**

**Overview of the NEPA Process** 

# **New Horizons Mission to Pluto**



- New Horizons Mission is scheduled to Launch from NASA's Kennedy Space Center in Florida in January 2006.
- Leaving Earth in 2006, New Horizons will swing by Jupiter for a gravity assist in 2007.
- Arriving as early as 2015, New Horizons will become the first-ever spacecraft exploration of Pluto.
- Potential Backup Launch Opportunity in February 2007 with arrival in 2019 or 2020
- The Principal Investigator for this mission is Dr. Alan Stern of the Southwest Research Institute in Boulder, CO
- The Johns Hopkins Applied Physics Laboratory in Laurel, MD is building the spacecraft.

# **New Horizons Mission to Pluto**



- Because this is a deep-space mission and traditional power systems (e.g. solar power) that far from the sun are not useful, New Horizons will utilize a radioisotope thermoelectric generator (RTG) to supply the electrical power for the spacecraft.
- RTGs enable spacecraft to operate on missions where solar power systems would not be feasible.
- An RTG is uniquely capable of powering this reconnaissance mission to distant Pluto where the Sun is no more than a bright point of light in the sky.
- RTGs have a proven record of safety and remain unmatched for reliability and durability over any other power technology for outer solar system missions.

# **New Horizons Mission to Pluto**



- The primary science requirements for this mission are to characterize the global geology and morphology of Pluto and Charon (Pluto's moon), map their surface compositions and temperatures, and examine Pluto's complex atmosphere.
- New Horizons is the first mission under NASA's New Frontiers Program.
- NASA confirmed the mission for development in March 2003.