

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
TO BOLDLY GO - SPACE STATION EDUCATION AND OUTREACH (5)

Author: Ms. Kerri Beisser

The John Hopkins University Applied Physics Laboratory, United States, kerri.beisser@jhuapl.edu

EDUCATION AND PUBLIC OUTREACH AT APL -NASA'S PLUTO MISSION -NEW HORIZONS:
INSPIRING THE NEXT GENERATION OF EXPLORERS.

Abstract

The Education and Public Outreach (E/PO) office in The Johns Hopkins University Applied Physics Laboratory (APL) Space Department strives to excite and inspire the next generation of explorers by creating hands-on, mind-on learning experiences. From the Sun to Pluto, APL is engineering the future of space exploration – examining Earth's near-space environment, our star, planetary bodies, and the outer solar system. The E/PO office provides unique opportunities for K-12 students, educators, undergraduate and graduate students, museums, science centers, and the general public to share in the excitement of the missions APL manages for NASA. The E/PO program uses mission and instrument science and engineering to enhance the nation's formal education system and contribute to public understanding of science, mathematics, and technology. The E/PO team makes space exploration an adventure for students of all ages. The E/PO office offers a unique glimpse into the Space Department's "end-to-end" approach to mission design and execution. APL designs, manages, fabricates, integrates, tests, and operates interplanetary space and Earth science missions and instruments. The Space Department is also charged the scientific challenge of capturing mission and instrument data and analyzing its content to create new scientific findings. Since 1959, APL engineers and scientists have designed, built, and launched 61 spacecraft and over 150 instruments. This paper will focus on the APL E/PO K-12 activities of the New Horizons mission to Pluto . New Horizons is over 4 years into its historic journey to Pluto and the Kuiper Belt, zipping along at more than 16 kilometers per second that's more than 36,600 miles per hour. That puts it halfway between Earth's location on launch day in January 2006, and Pluto's place during New Horizons' encounter with the planet in July 2015. In total it will be almost 10 years and over 3 billion miles, a journey well worth the wait as New Horizons will shed light on new kinds of worlds and the origins of our planetary system. The second half of the journey begins now, this is rare territory; New Horizons is just the fifth probe, to traverse interplanetary space so far from the Sun. And it's the first to travel so far to reach a new planet for exploration.