SPECIAL DATE AND TIME

Evolving views of the outer solar system: new insights from **NASA's New Horizons mission's** historic first Pluto fly-by

Dr. Kimberly Ennico Smith

NASA Ames Research Center, Astrophysics Branch

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On July 14, 2015, after a 9.5 year trek across the solar system, NASA's New Horizons spacecraft successfully flew by Pluto and its system of moons, taking imagery, spectra and in-situ particle data. In this internetinformation age, this historic first fly-by was shared across planet Earth, everyone witnessing first-hand the transformation of distant point of lights into real worlds. The New Horizons' dataset has become an invaluable first glimpse into the outer Third Zone of the Solar System. Pluto has revealed itself to be a complex, beautiful place, with a variety of geophysical and surface-atmosphere interactions. Charon has been unmasked; its surface features implying a complicated, enigmatic history. The smaller moons are uniquely different in their own right. This presentation summarizes NASA's New Horizons mission and its early science results, and touches on how this mission's science results affect formation models of our solar system and other solar systems.