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THE COVER

Visualizing the upcoming passage of the New Horizons spacecraft past Pluto and its large satellite Charon necessarily involved a lot of educated guesswork. Pluto is so small (about 2,360 kilometers in diameter) and so distant (currently 4.9 billion kilometers away) that it is impossible to image directly from Earth. Artist Steve Gribben at Johns Hopkins University had to rely on sparse visual data from the Hubble Space Telescope and consultations with members of the New Horizons team to guide the colors and surface features seen on the cover. As mission scientist S. Alan Stern explains in “Journey to the Solar System’s Third Zone” (pages 42-45), the Pluto flyby will offer a first look not just at this one unexplored world but at an entire class of intriguing poorly understood bodies orbiting the Sun beyond Neptune. (Image Courtesy Of NASA/Johns Hopkins University Applied Physics Laboratory/Southwest Research Institute/Steve Gribben.)