NASA’s Imaging X-Ray Polarimetry Explorer (IXPE) was launched into space December 9, 2021, and looks at “polarimetry” of X-rays, or how X-ray light is oriented as it travels through space. Like Chandra, one of the first objects IXPE focused on was the supernova remnant Cassiopeia A (Cas A). The shock waves from the explosion have swept up surrounding gas, heating it to high temperatures and accelerating cosmic ray particles to make a cloud that glows in X-ray light. The image combines X-ray data from both IXPE and Chandra data of Cas A. The saturation of the green color corresponds to the intensity of X-ray light observed by IXPE, which has been overlaid on high-energy X-rays from Chandra (blue) and optical light from Hubble (gold). Credits: NASA/CXC/SAO/IXPE