Planetary Nebulas

When a star like our Sun runs out of hydrogen, it puffs off its outer layers and leaves behind a hot core. Winds from this core create a complex and graceful filamentary shell called a planetary nebula (so called because it looks like the disk of a planet when viewed with a small telescope). This panel of images shows four examples of planetary nebulas where Chandra’s X-ray data (purple) have been combined with optical images from Hubble (yellow and cyan). X-ray images reveal clouds of multimillion-degree gas that have been compressed and heated by these winds.