Role of the Chandra X-Ray Observatory Observations for the Study of Ionized Plasmas

Martin C. Weisskopf

The Chandra X-Ray Observatory, launched in 1999, is now beginning its 12-th year of operation. Chandra, the X-ray component of NASA’s Great Observatory program, continues to operate efficiently, somewhat remarkable considering that the Observatory was designed for three years of operation with a goal of five. The Observatory features X-ray optics with sub-arcsecond angular resolution and a small suite of instruments, including transmission gratings, which allow for high-resolution spectroscopy of point sources. We will detail the capabilities of the Observatory for making such spectroscopic measurements and discuss a number of examples of what has been learned about the astrophysical plasmas capable of producing bright X-ray emission.