

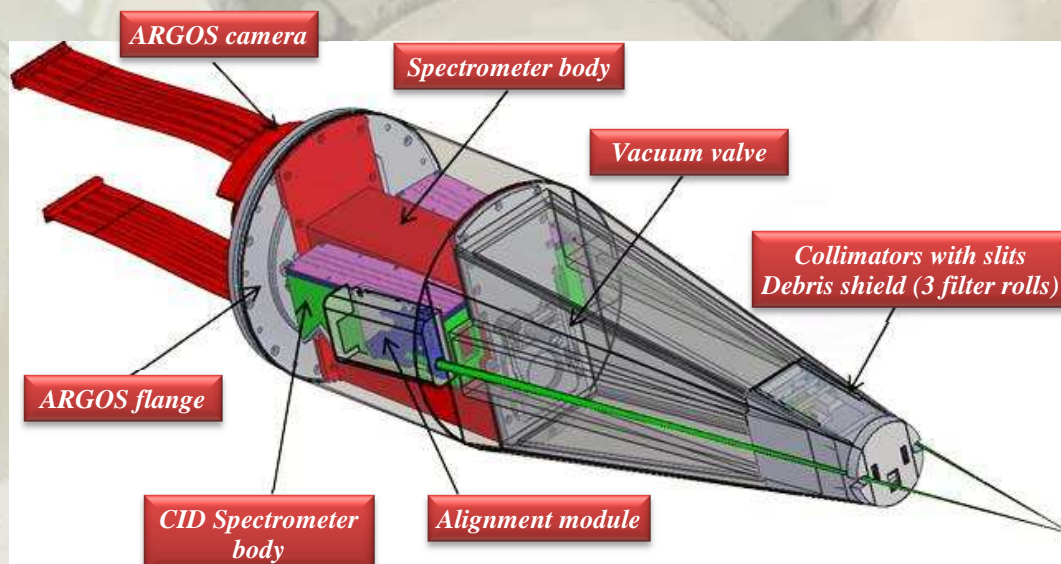
HRXS

High Resolution X-ray Spectrometer

The High Resolution X-ray Spectrometer is dedicated to atomic physics (NLTE spectroscopy and opacity measurements). The central body is associated with the framing camera ARGOS (4 channels).

It can be outfitted with one broad cylindrical concave crystal in order to get four frames at 4 different times in one spectral range or with two crystals in order to get 2 frames on each crystal and two different spectral ranges. On each side, there is a lateral spectrometer body with a CID detector and with three cylindrical concave crystals. The front end of the spectrometers includes a snout with collimation slits and a debris shield made of three filter rolls.

Two alignment modules are included in the setup. This diagnostic is inserted by a SID (System for Insertion of Diagnostics) inside the target chamber. Distance of target to front end is 250 mm, distance of target to detectors is about 1000 mm.



Characteristics	Spectral range (resol. $E/\Delta E$)	Spatial resol. (μm) / Field of view (mm)	Time resolution (ps) / Dynamic (ns)	Setting/ Operational
Slit magnification = 3	1 – 15 keV (~ 500)	70 (1D) / 5		SID
4 time-resolved crystal channels			110 - 130 / 20	
2 x 3 time-integrated crystal channels (CID)			without	2019