

S16a XRISM Observation of Powerful Disk Wind Quasar PDS 456: 2. Initial analysis and results

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X-ray UltraFast Outflow (UFO) is the very fast, highly photoionized wind launching from the close vicinity of the supermassive black hole. PDS 456, a nearby quasar, is known to host one of the most powerful and persistent UFOs. In the CCD era, it is pointed out that the X-ray spectrum may show a P Cygni profile, which consists of a blueshifted absorption line and a Doppler-broadened emission line from the wind with a large solid angle. Here, our 240 ks observations of PDS 456 with the XRISM satellite provides us with the X-ray complex spectral features with the highest energy resolution than ever. In this talk we show our initial analysis and results for our XRISM observation and discuss the physical picture of PDS 456, including blind search for the emission/absorption features, time-variability analysis, photo-ionized absorption model, self-consistent wind model, and so on.