



X-RAY ASTRONOMY 2019

Current Challenges and New Frontiers in the Next Decade

8-13 September 2019
CNR/INAF Research Area, Bologna, Italy

Contribution ID: 209

Type: **Poster**

Solving the hard X-rays excess in the NLSy 1 TON S180

Friday, 13 September 2019 18:08 (2 minutes)

We present a detailed analysis of a joint *XMM-Newton* & *NuSTAR* observation of the nearby ($z = 0.062$) luminous NLSy 1 galaxy TON S180 taken in 2016. We find that the observed steep soft excess is likely produced by Comptonization rather than relativistic reflection. By analyzing the broadband SED from 1 eV to 35 keV, we find that the overall intrinsic properties of the continuum can be accounted for by thermal emission from the disc (UV) plus Comptonized emission from the corona at a high fraction ($\sim 70\%$) of the Eddington limit. We also find that there is a weak contribution of disc reflection with a moderate black hole spin.

Topic

Active Galactic Nuclei: accretion physics and evolution across cosmic time

Affiliation

ESA/ESAC

Primary authors: MATZEU, Gabriele (European Space Agency/European Space Astronomy Centre); NARDINI, Emanuele (Istituto Nazionale di Astrofisica (INAF)); Dr PORQUET, Delphine (LAM); Dr REEVES, James (University of Maryland); BRAITO, Valentina; PARKER, Michael (ESA/ESAC); Dr SANTOS-LLEO, Maria

Presenter: MATZEU, Gabriele (European Space Agency/European Space Astronomy Centre)

Session Classification: POSTER SESSION