



# X-RAY ASTRONOMY 2019

*Current Challenges and New Frontiers in the Next Decade*

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## A Catalogue of XMM-Newton BL Lacs

*Friday, September 13, 2019 5:00 PM (2 minutes)*

A XMM-Newton catalogue of BL Lac X-ray properties is presented based on the cross-correlation with the 1374 BL Lacs listed in the 13th edition of the Veron-Cetty and Veron (2010) catalogue. X-ray counterparts to these objects are searched in the field of view of around 10000 XMM-Newton pointed observations. The cross-correlation yielded a total of 352 XMM-Newton observations which corresponds to 102 different sources. Data from the three EPIC cameras and OM were homogeneously analysed using the XMM-Newton SAS software. Images, lightcurves and spectral products are produced for those BL Lacs detected in any of the three EPIC cameras. Two different phenomenological models, with different variations of the absorbing column density, are tested: Log-Parabolic and Powerlaw. We determine the best fit model and extract its

parameters. The results of the analysis are presented as a catalogue of X-ray spectral properties of the sample in the 0.2 - 10 keV energy band as well as in the V/UV band. Multiwavelength information at radio and gamma-ray energies complete the catalogue.

### Topic

Active Galactic Nuclei: accretion physics and evolution across cosmic time

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