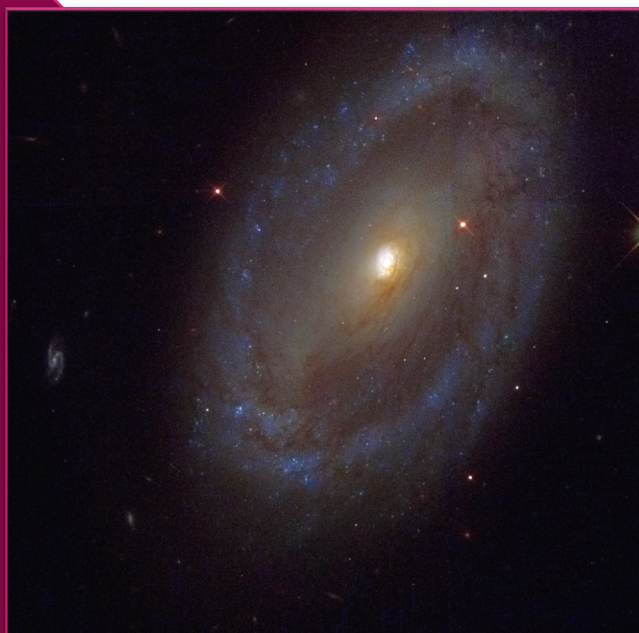




Keir Birchall

Organization: School of Physics
& Astronomy, University of
Leicester (ULEIC)

Position: Post-doc



Dr Keir Birchall is a post-doctoral researcher at the University of Leicester. Their PhD focused on finding the types of galaxies that host active galactic nuclei (AGN) – black holes that are consuming gas, causing them to release huge amounts of radiation. AGN can be most clearly identified in the X-ray part of the electromagnetic spectrum. By searching the skies for these X-ray signals and matching them up with optical galaxy images, Keir could then determine the properties of the galaxies that hosted AGN: were they more massive, at a higher redshift, did they produce more stars?

Now Keir works in the XMM2Athena consortium, focusing on science validation. This involves working with researchers from across the consortium to demonstrate the scientific value of the exceptional work being done to improve *XMM-Newton* algorithms and datasets, by aiding in the design and communication of experiments.

They are also undertaking their own research, using the latest *XMM-Newton* data to perform measurements of how densely AGN of different brightnesses are found across the sky. This will help inform our understanding of how AGN formed and grew through the lifetime of the Universe.