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**TITLE:** Searching for decaying axion-like dark matter from clusters of galaxies

**ABSTRACT:**

In merging clusters of galaxies, the baryonic and dark matter components becomes temporarily displaced, providing perfect conditions for studying dark matter. A possible dark matter candidate is the generic Kaluza-Klein axion, which has been invoked as a possible explanation for the solar coronal X-ray emission. Such particles can be produced inside stars and remain confined by the gravitational potential of clusters. I will present observations of two different merging cluster systems. From the observations, constraints on the lifetime of generic axions can be obtained and compared with the results derived for solar axions.