

# Multi-wavelength Analyses of Merging Binary Galaxy Clusters

Turgay Çağlar<sup>1</sup>★,

<sup>1</sup>*Leiden Observatory, Astronomy Department, Leiden*

## Özet

Clusters of galaxies are the largest observed laboratories, which are formed around massive galaxies due to gravitational in-fall of other objects. Multi-wavelength investigations of galaxy clusters allow us to understand structure formation of the universe. One of the most interesting results of these investigations is the collisions between massive objects, such as cluster-cluster interactions, which are known as mergers. In this study, we aim to understand the dynamical structures of our samples and physical processes throughout mergers. We present a multi-wavelength analyses results of the following galaxy clusters: Abell 3653, Abell 141. X-ray luminosity and optical density maps confirm that both galaxy clusters are bimodal merging galaxy clusters. Furthermore, comparisons between optical and X-ray data reveals that while both galaxy cluster are in an early stage of merger.

**Anahtar Kelimeler:** galaxies: clusters: general, Samanyolu, Galaksiler, Kozmoloji

## Editör Notu:

Bu bildiri UAK-2018'te sunulmuştur. Bildiri sahibi tam metin göndermediği için başvuru sırasındaki özet basılmıştır.

## Erişim:

O44-1655: [UAK-2018 Program](#) — [UAK Bildiri](#) — [Turkish J.A&A](#).