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Opportunities for Multiwavelength Analysis of Active Galactic Nuclei with the Radio Telescope Astropeiler

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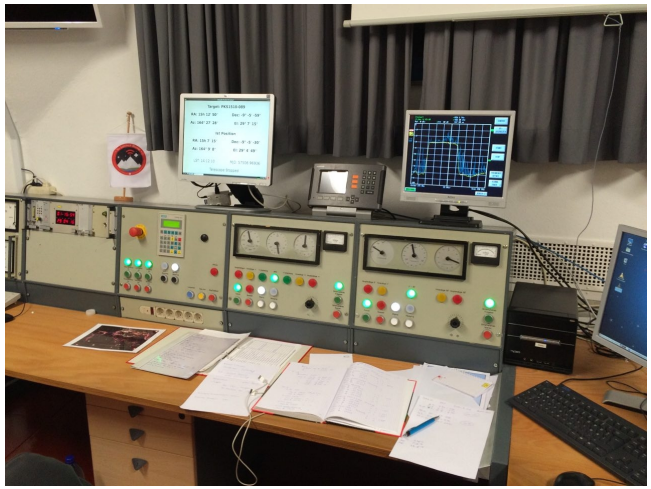
Radio Telescope Astropeiler Bad Münstereifel

- 1956: Year of construction
- Until 1990: Scientific operations
- 1995: Foundation of the Astropeiler Stockert e.V.
- 2005: Handover to the NRW Stiftung
- 2009: Restoration of the telescope

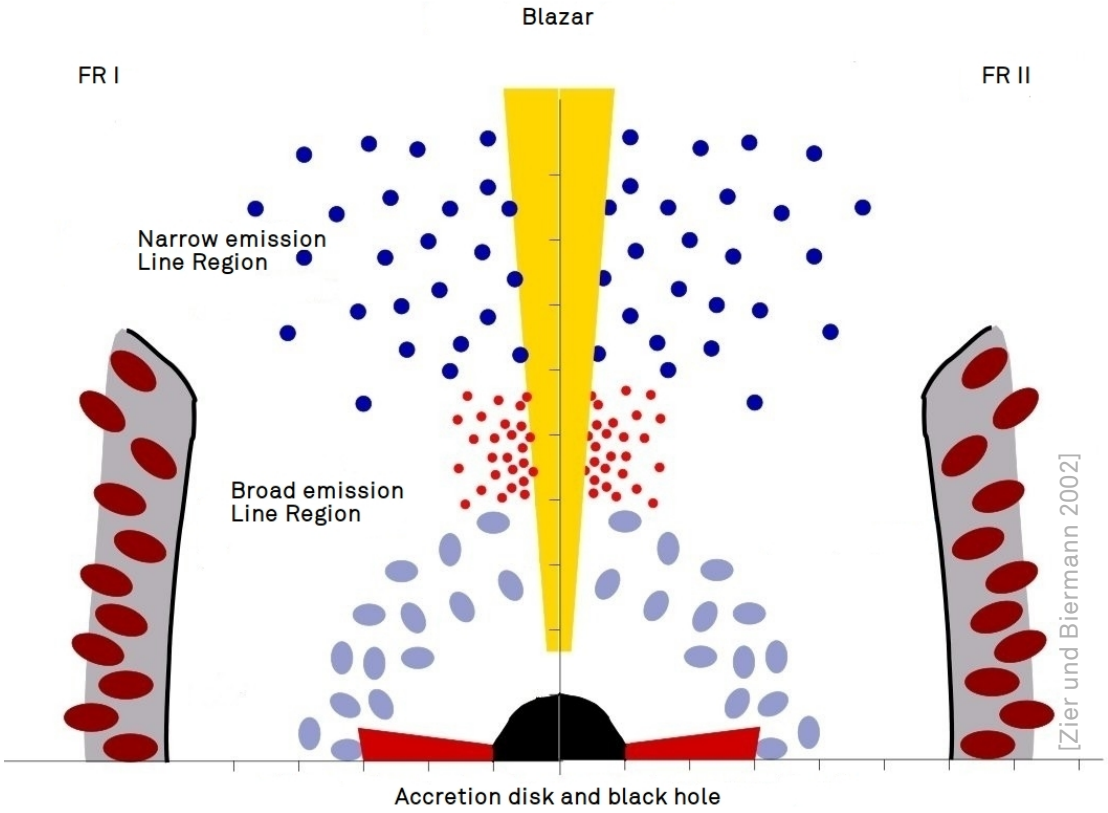
Radio Telescope Astropeiler

- Frequency: 1.4 GHz
- Diameter of antenna: 25 m
- Resolution: 0.6 degree



Motivation

Multiwavelength observations
of Active Galactic Nuclei



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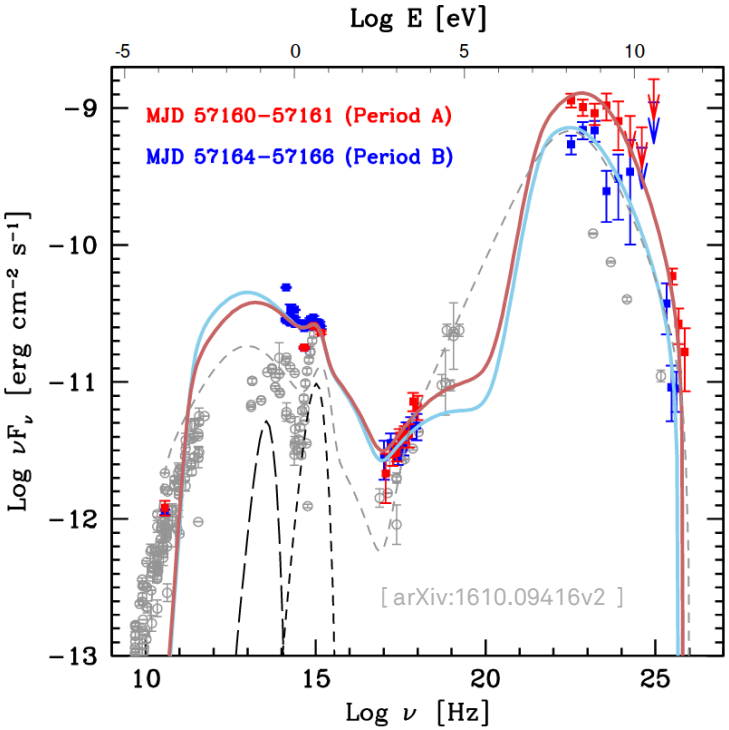
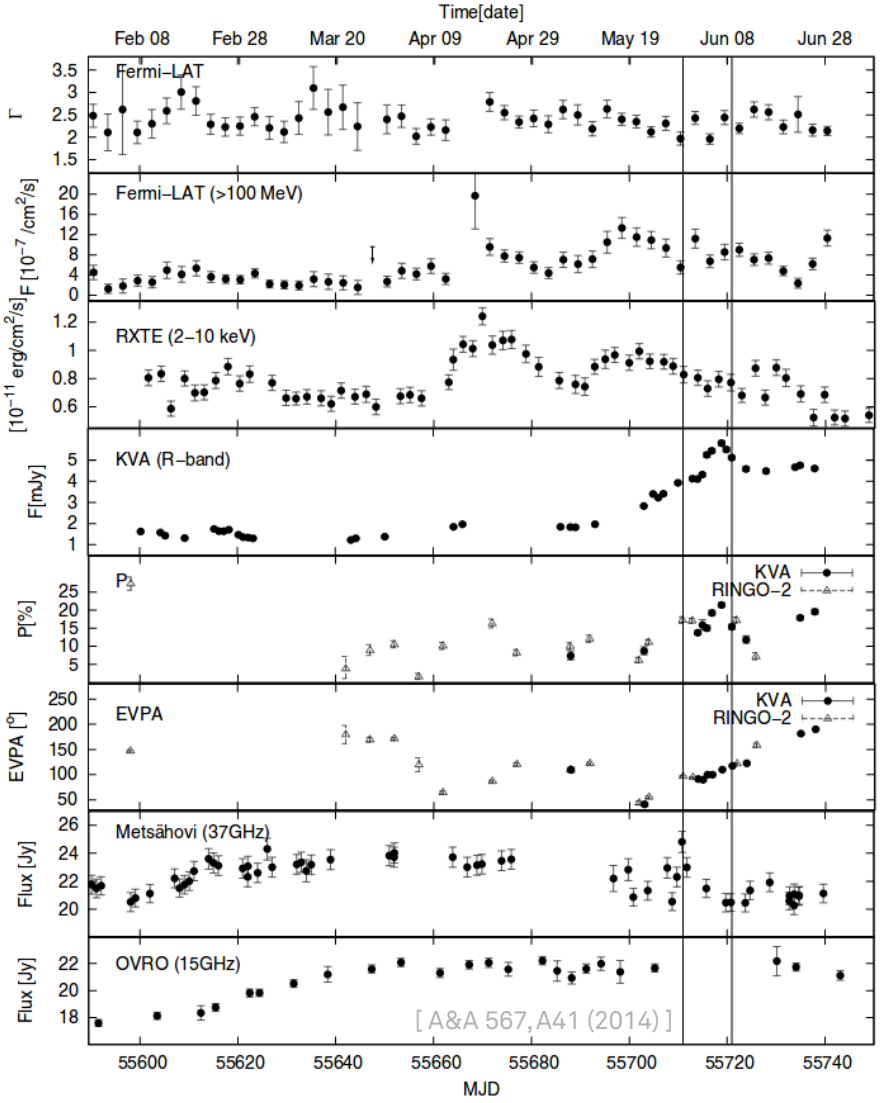
Multiwavelength observations of Active Galactic Nuclei





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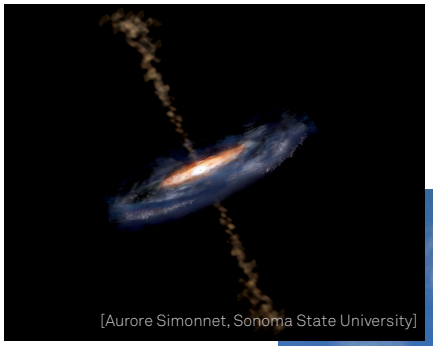
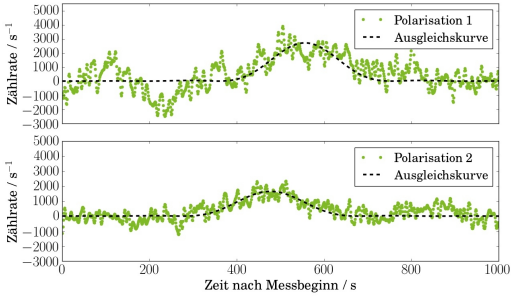
Multiwavelength observations of Active Galactic Nuclei



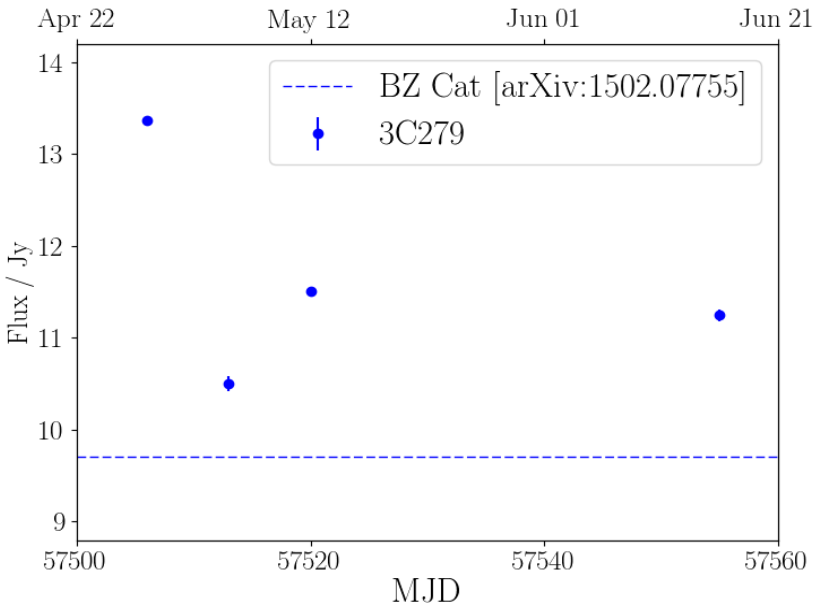
Prospects of the Astropeiler

- Standard observations
- Spontaneous follow-up observations
- Long-term observations

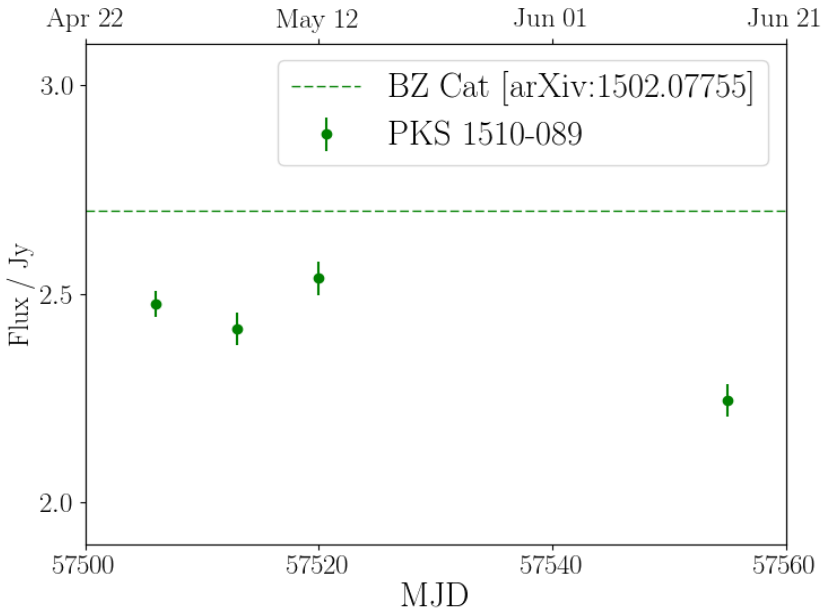


Measurements by the Astropeiler (2016)

3C 279

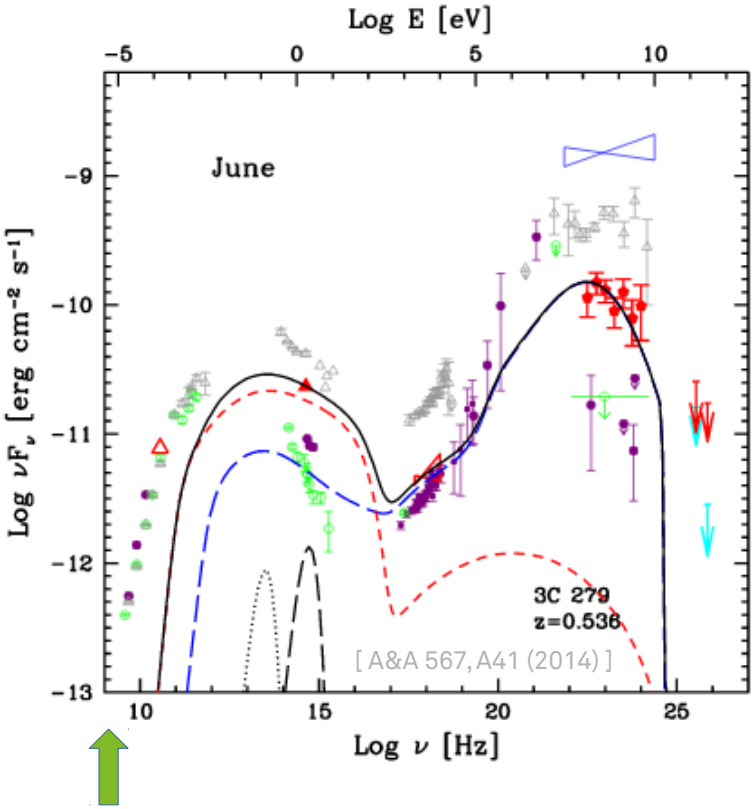


PKS 1510-089

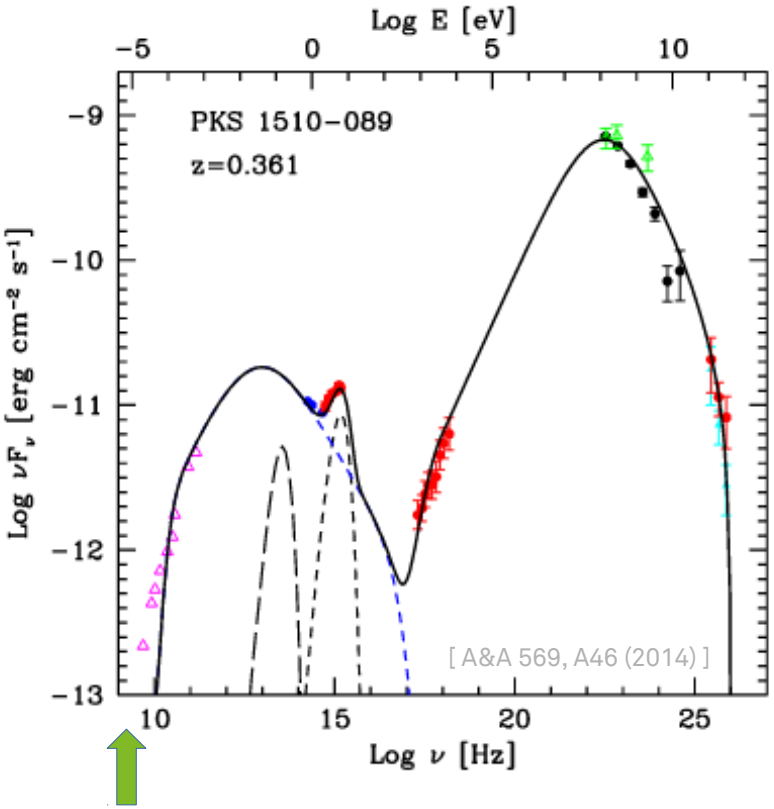


Measurements by MAGIC

3C 279



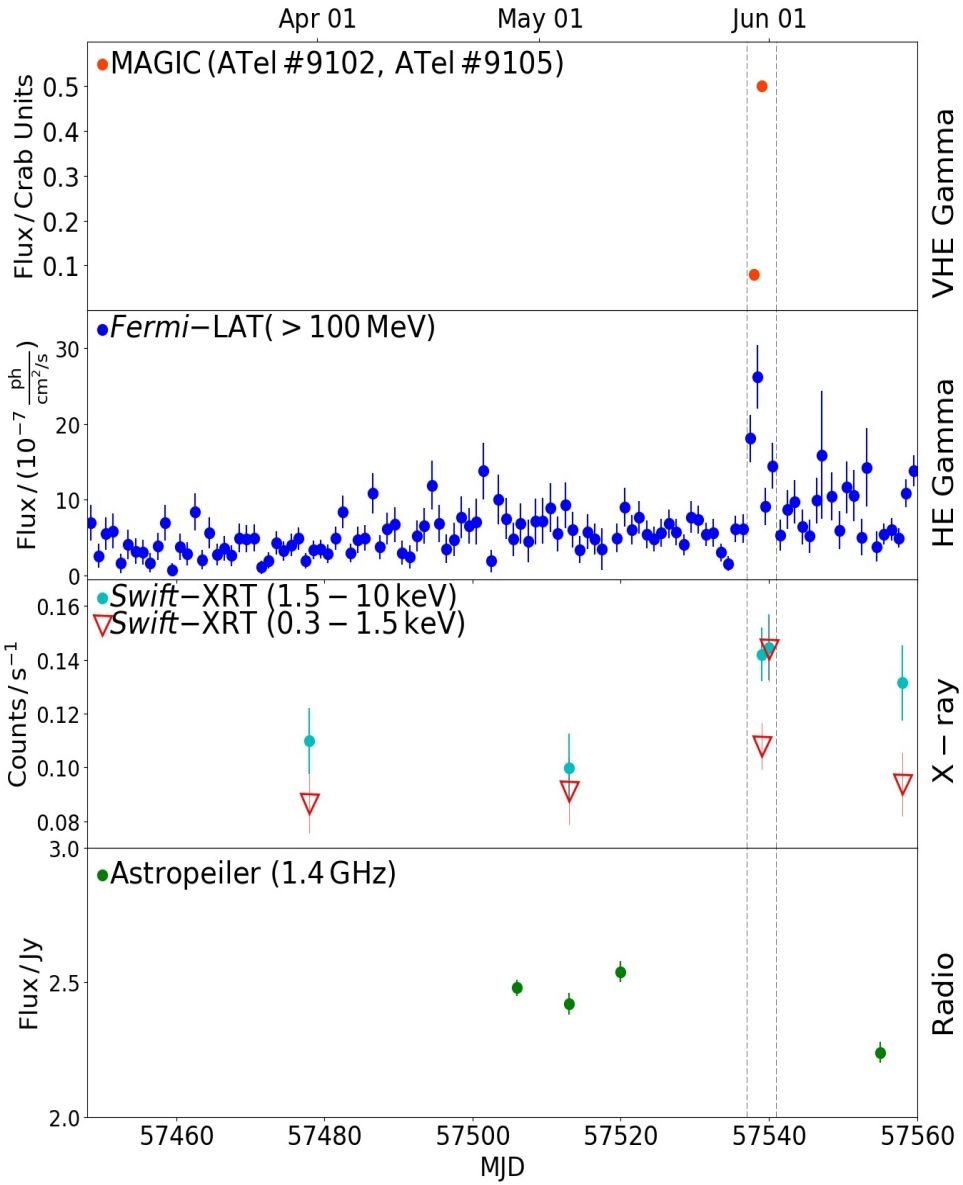
PKS 1510-089



Multiwavelength Data of PKS 1510-089

- Increased flux at the end of May 2016
- Follow-up observation with the Astropeiler

➡ No detection of an increased flux



Conclusion

- Capability of radio telescope Astropeiler for observation of AGNs proven
- Monitoring of selected sources
  → Data for multiwavelength analysis
- Spontaneous and long-term observations