Contribution ID: **1320**   Type: **Poster**

TELAMON: Monitoring of AGN with the Effelsberg 100-m Telescope in the Context of Astroparticle Physics

Monday, July 12, 2021 7:18 PM (12 minutes)

We introduce the TELAMON program, which is using the Effelsberg 100-m telescope to monitor the radio spectra of active galactic nuclei (AGN) under scrutiny in astroparticle physics, namely TeV blazars and neutrino-associated AGN. Thanks to its large dish aperture and sensitive instrumentation, the Effelsberg telescope can yield superior radio data over other programs in the low flux-density regime down to several 10mJy. This is a particular strength in the case of TeV-emitting blazars, which are often comparatively faint radio sources of the high-synchrotron peaked type. We perform high-cadence high-frequency observations every 2-4 weeks at multiple frequencies up to 44GHz. This setup is well suited to trace dynamical processes in the compact parsec-scale jets of blazars related to high-energy flares or neutrino detections. Our sample currently covers about 40 sources and puts its focus on the high-peaked BL Lac objects and extreme blazars most frequently observed by TeV telescopes. Here, we introduce the TELAMON program characteristics and present first results obtained since fall 2020.

Keywords

AGN; Blazars; AGN monitoring; Radio flux density measurements

Collaboration

other (fill field below)

other Collaboration

TELAMON

Subcategory

Experimental Results

Primary author: KADLER, Matthias (JMU Wuerzburg)

Co-authors: Dr BACH, Uwe (MPIfR); DORNER, Daniela (Universität Würzburg); Dr EDWARDS, Phil (CSIRO); Mr EPPEL, Florian (JMU Würzburg); Dr GIROLETTI, Marcello (INAF); GOKUS, Andrea; Mr HESSDÖRFER, Jonas (JMU Würzburg); Dr KOYAMA, Shoko (ASIAA); Dr KRAUS, Alex (MPIfR); Dr KRICHBAUM, Thomas (MPIfR); Dr LINDFORS, Elina (UTU); Prof. MANNHEIM, Karl (Universität Würzburg); Dr OJHA, Roopesh (NASA); Mr PARASCHOS, Georgios Filippos (MPIfR); Mr RÖSCH, Florian (JMU Würzburg); Prof. ROS, Eduardo (MPIfR); SCHLEICHER, Bernd (University of Wuerzburg); Mr SINAPIUS, Jonas (JMU Würzburg); SITAREK, Julian (University of Lodz); WILMS, Joern (ECAP & Remeis-Observatory, University of Erlangen-Nuremberg)

Presenter: KADLER, Matthias (JMU Wuerzburg)

Session Classification: Discussion

Track Classification: Scientific Field: MM | Multi-Messenger