27th Young Scientists' Conference on Astronomy and Space Physics



Contribution ID: 3 Type: not specified

X-ray analysis of the structure of relativistic AGN jets of Cygnus A (12+3)

Monday 26 April 2021 19:25 (15 minutes)

Cygnus A is a giant elliptical galaxy, one of the most powerful radio galaxy. Like other radio galaxies, its activity is determined by active galactic nucleus (AGN) - supermassive black hole, surrounded by accretion disk, and with two relativistic jets, diverging in opposite directions from the supermassive black hole. We investigate the two hotspots - A and B - at the end of the eastern relativistic jet of Cygnus A. We analyze the X-ray emission of these hotspots using observational data from Chandra Data Archive and estimate the mechanism(s) of generation of X-ray emission.

Author: Ms ZHYHANIUK, Yelyzaveta (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)

Co-authors: Prof. HNATYK, B. I. (Astronomical Observatory of Taras Shevchenko National University of Kyiv, Kyiv, Ukraine); Dr MARCHENKO, V. V. (Astronomical Observatory, Jagiellonian University, Krakow, Poland)

Presenter: Ms ZHYHANIUK, Yelyzaveta (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)

Session Classification: High energy astrophysics