

Short talk

SPECTRAL LINES IN THE AFTERGLOW OF GAMMA RAY BURSTS

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In this short talk we will give a brief description of the observed spectral lines in the afterglow of the gamma ray bursts (GRB). The nature of the GRB afterglow is based on the fast moving matter entering the surrounding steady interstellar medium. As the result of the interaction absorption and emission lines could be produced. We will present a simplified analyze using known line profiles to show a possible way of lines creation. Also, we will discuss the influence of different GRB models which describe the fireball evolution on line profiles observed in an afterglow.

Short talk

**Mrk 334: CONNECTION BETWEEN NUCLEI
ACTIVITY AND MERGING OF A COMPANION**

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We have investigated Mrk 334 using method of panoramic spectroscopy on Russian 6m telescope. The central regions were observed with integral-field spectrograph MPFS, the large-scale velocity fields of the ionized gas in the emission lines were constructed from observations with scanning Fabry-Perot interferometer. Based on these data we consider gas and star kinematic in the circumnuclear region as well as in the outer parts of the galaxy. The effects of possible merging on the AGN fuelling are studied.