

*Poster paper*

**STUDYING OF SOME SEYFERT GALAXIES BY THE  
METHODS OF PANORAMIC SPECTROSCOPY**

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We have studied some galaxies with active nuclei using method of panoramic spectroscopy. The results of panoramic spectroscopy obtained with Russian 6m telescope are presented: the circumnuclear region were observed with integral-field spectrograph MPFS, the large-scale velocity fields of the ionized gas were constructed from observations with scanning interferometer Fabry-Perot. We have constructed intensity maps and velocity fields as in different lines of ionizing gas as in stars. Also diagnostics diagramms have been made in order to define what is a source of ionization (active nuclei, hot young stars or shock waves).

*Poster paper*

**ANALYTICAL CURVES REDUCTION BY USING  
FRACTIONAL DERIVATIVE SPECTROMETRY**

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A new fitting method that is useful in the fitting procedure has been discovered. Several positive effects of a fractional derivative connected with the behavior of its zero-crossing and maximal amplitude allow one to fit experimental data into well-known profiles such as Gaussian, Lorentz and Tsaliss, to estimate their spectral parameters. This method is based on the ordinary least squares approach, but fractional derivatives help one to avoid possible problems of least squares method approach. In this paper described method is demonstrated on model files and on experimental too. In this paper we utilize this method using Lorentz-Gaussian model for decomposition of overlapping peaks with a fractal noise.