# SOME PECULIARITIES OF VARIABLE OPTICAL SPECTRA OF 11 LOW-REDSHIFT QUASARS

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The flux of narrow 5007 Å [OIII] forbidden line during last 20 years is accepted as a bench-mark for calibration of the continuum and broad-lines fluxes in AGN. But one can not get away from the problem of the forbidden lines variability in these objects. The first report were published by Bardin et al. (1967). Some of the results are revieved by V.Pronik, I.Pronik (1988,1992). There were 4 years monitoring of[OIII] fluxes variability in the Seyfert galaxy NGC 1275 nucleus (Pronik et al.,1990). Now we reexamine the published data of W.Zheng et al. (1986,1987,1988), discussed earlier in supposition of forbidden lines constant in spectra of 11 low-redshifted QSOs. Maximal calibration coefficients adopted by W.Zheng et al in supposition of [OIII] lines constant were in the interval 2.0-3.6. On the other hand the fluxes errors are about 15%. Disagreement is very high. This is one of the arguments in the forbidden lines variability rightness.

The considered relation $log\, L_{[OIII]} - log\, L_\beta$ has a jumping character. Theire smooth parts of the relation have coefficients of correlations equal to 0.72 – 0.98. Single QSO variation shows the similar behaviour as that of the objects of different luminosities. The degree of one QSO [OIII] lines flux variation are 25 – 100% during 4 – 9 years. QSOs groups formed one smooth relation divided mainly by ratio $I_{[OIII]}/I_\beta$. When $I_{[OIII]}/I_\beta > 1.6$, $I_{[OIII]} \sim I_\beta$; when $I_{[OIII]}/I_\beta < 1$, $I_{[OIII]} \sim I_\beta^{1.4}$

Untill now there is no general theory explaining the forbidden lines variations in AGN in a time scale of years and months. Same attempts were published by Bochkarev (1987) and Fabrika (1987). V.Pronik and I.Pronik (1988,1992) proposed for the regions of neutral hydrogen the mechanism of ionization of oxygen and other heavy elements by soft X-rays. For regions of ionized hydrogen they proposed usual well known collisional exitation mechanism in HII regions of high electron temperatures ($T_e > 28000$ K) and high electron concentrations ($n_e > 10^7 cm^{-3}$).

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