

QSO/AGN ENVIROMENTS AT DIFFERENT REDSHIFTS

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With the availability of large data sets like the Sloan Digital Sky Survey (SDSS) is it now possible to study a huge amount of galaxy spectra in a statistical manner. The spectroscopical data set of the 7th SDSS data release covers 9380 deg² ($\approx 23\%$ of the whole sky). We selected nearly 100 000 objects from the SDSS data release 7 that were classified spectroscopically as quasars to investigate their environment. We developed a dedicated software-pipeline to process this huge amount of data. We classified all galaxies within the quasar-neighborhood of 1 Mpc according to Kauffmann et al. (2003) and Kewley et al. (2006) into a diagnostic BPT diagram. For doing this we had to measure out manually the narrow Balmer lines using the IRAF task "splot". Furthermore, we studied the distribution of these objects and their spectroscopical properties such as the absolute magnitudes and the 4000 Å-break. I will give an overview of my work and present recent results.

References

- Kauffmann, G. et al.: 2003, *MNRAS*, **346**, 1055.
Kewley, L. J., Groves, B., Kauffmann, G. and Heckman, T.: 2006, *MNRAS*, **372**, 961.