

## **SPECTRA OF SOUTHERN QSO**

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**Spectral indices distribution of 684 radio-sources identified as quasars by Veron-Cetty and Veron (1983) located at south of declination -10 degrees, are analyzed. The spectral indices studied are between frequencies 408 and 1410 MHz, 1410 and 2700 MHz, and 2700 and 5009 MHz. About 33% of the sources with spectral indices measured are normal steep spectra radio-sources. The distribution of spectral indices show significative energy loss between 1410 and 2700 MHz for about 15% of the sample. From the literature it is known that QSO radio spectra turn over near 1 GHz due to synchrotron self-absorption (Kapahi 1981, Peacock and Wall 1981, Downes et al. 1981). These radio-sources have attracted considerable attention because they seem to be associated with quasars of high redshift (Gopal-Krishna et al. 1983). From the present sample we found 17 GPS sources (2.4%). With these sources a total of 67 GPS sources are known.**

## **POLARIZATION ROTATOR EVENTS IN SOUTHERN EXTRAGALACTIC ACTIVE RADIO SOURCES**

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**Quasilinear rotations in the polarization position angle of two extragalactic active radio sources have been observed recently at 1435 MHz. The observations may be interpreted in terms of relativistic jet models. In this context, the observed polarization position angle rotation results from the propagation of a strong shock wave along a relativistic force-free jet with a nonaxisymmetric magnetic field configuration. Several internal parameters of the sources are estimated and matched with independent high resolution observations.**