

[GC05] CO Observations of the Pisces Filament

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We present CO(J=1-0)(115 GHz) spectra of 15 galaxies in the Pisces filament. The data were obtained with the NRAO 12 m telescope at Kitt Peak. All galaxies except for UGC 540 and UGC 556 were detected in CO for the first time. Our observations achieved an average sensitivity of 1.6 mK after smoothing the spectra to a resolution of 20 km/s. We calculated CO line fluxes and molecular gas masses from line integrated intensities and measured profile widths with the method regarding asymmetric nature of HI distribution in the galaxy. The CO properties of the Pisces filament described in this work will be used to calibrate CO Tully-Fisher relation and study the star formation history of galaxy clusters with other multi-wavelength data.

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[GC06] VLBI monitoring of OVV 1633+382  
after mm flare - 22GHz preliminary results

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OVV 1633+382 (4C38.41,  $z=1.807$ ) showed a very pronounced outburst in 2001/2002. With a peak amplitude of more than 9 Jy at 90GHz, this flare was brighter than any known previous flare in this source (data available since 1980). During the onset, the mm-flare was particularly fast, with an increase of more than 2 Jy at 230 GHz in less than 8 days. Since January 2002, the mm-flux of 1633+382 is decaying. During this decline, however, local flux variations with amplitudes of 1-3 Jy were seen, indicative of underlying and more rapid source activity on time scales of 1-2 months. After the main peak occurring in 2001.99, the 90 GHz flux showed secondary maxima at approximately half year intervals in 2002.3, 2002.7 and 2003.13. This kind of periodicity might be explained via the lighthouse model, which is based on the magnetic accelerator. At present the millimeter flux is nearly back to its quiescent level of 2-2.5 Jy, which the source had before the flare began. Our multi-frequency (22GHz/43GHz/86GHz) VLBI Polarimetry monitoring program started June 2002 during the onset of the flare. We present preliminary 22GHz VLBI total intensity images of OVV 1633+382.