

HYDRA - CENTAURUS: A REDSHIFT SURVEY

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The survey consists of 2 samples : SAMPLE A, 85% complete to $B(T) = 14.0$ in the region between 10 and 14 Hours in R.A. and between -20 and -50 degrees in DEC., SAMPLE B, complete to $B(0) = 14.5$ in two regions one between R.A. 13 and 14 hours, DEC between -25 and -33 , the other between 11 and 12 hours, DEC from -33 to -27 .

The results are:

- 1) Hydra and Centaurus are only weakly connected via a low density bridge at about 3000 km/sec and declination around -37° .
 - 2) A large void has been detected in the region between $10^h 50^m$ and $12^h 30^m$ and declination north of -40 degrees, extending in the velocity space between 3500 km/sec and 7000 Km/sec.
 - 3) The Centaurus structure extends to the north east and connects to a region rich in groups and clusters at redshifts of the order of 4700 km/sec. Centaurus may also be connected with the Pavo Indus structure on the other side of the Milky Way.
- So far we have obtained 400 hundred new redshifts, so that the total number of redshifts available in this region is about 900.

Completion of the sample is under way to understand the anisotropy of the matter distribution and its effect on the large scale motion.

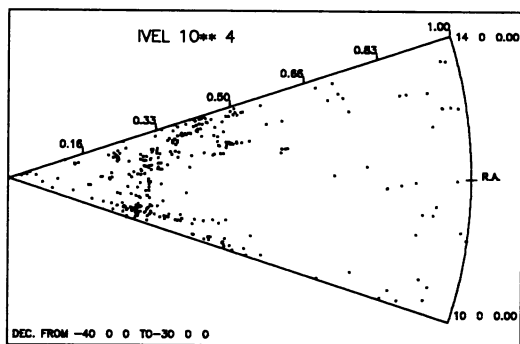


FIG. 1 The cone diagram evidences the tenuous connection between Hydra and Centaurus regions. Part of the void is also visible.