

A SURVEY OF NEARBY CLUSTERS OF GALAXIES: FIRST RESULTS

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We report the main preliminary results which are coming out from the ESO key-programme "A Survey of Nearby Clusters of Galaxies", described in Mazure et al. (1991). This programme is based on multispectroscopy of about 100 southern clusters of galaxies with the OPTOPUS multifiber instrument at the ESO 3.6 m telescope. The candidate galaxies for spectroscopy are found from automatic scans of survey plates, obtained with the Leiden ASTROSCAN measuring machine. This machine also produces photographic photometry to be calibrated with CCD B and R photometry of selected subsample of galaxies in each cluster field (mostly obtained with the 1.54 m Danish telescope). We have performed spectroscopic data reduction (which includes fiber extraction, wavelength calibration, continuum removal, and cross correlation) by means of FIGARO routines installed in Granada and Montpellier. So far we have obtained about 2,500 reliable redshifts for the following 66 ACO clusters (from 5 to more than 100 redshifts per cluster): 151, 168, 295, 303, 367, 514, 543, 754, 957, 978, 1069, 1809, 2040, 2048, 2052, 2353, 2354, 2383, 2426, 2436, 2480, 2715, 2717, 2734, 2764, 2765, 2819, 2871, 2911, 2915, 3009, 3093, 3094, 3108, 3112, 3122, 3141, 3142, 3158, 3223, 3264, 3341, 3354, 3365, 3528, 3558, 3559, 3562, 3651, 3667, 3677, 3682, 3691, 3696, 3703, 3744, 3764, 3781, 3795, 3809, 3822, 3825, 3827, 3864, 3879, 3897. For many of these clusters no velocity dispersion (and sometimes even no mean redshift) are available in the literature. We have begun the analysis of the velocity field of the 10 clusters for which we present the velocity histograms in the Figure. The hatched histograms refer to

cluster members, identified according to the procedures described in Girardi et al. (1993).

REFERENCES

Girardi, M., Biviano, A., Giuricin, G., Mardirossian, F., & Mezzetti, M., 1993, ApJ, in press.

Mazure et al., 1991, ESO Messenger **65**, 7.

