RADIAL VELOCITIES OF REMOTE GLOBULAR CLUSTERS

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ABSTRACT. Radial velocities good to 25 km/s have been measured for the remote globular clusters Eridanus, NGC 2419, Palomar 3, Palomar 4, Palomar 5, Palomar 14, and Palomar 15. Spectra with a resolution of 3.0 A were recorded for 4 to 10 stars at a time in each cluster, using an aperture plate with the KPNO 4m telescope, R-C spectrograph, Simmons camera, and baked IIIaJ plates. Radial velocities for each star were determined from the position of the night-sky emission feature near 4360A with respect to several strong atomic features in the vicinity.

For two remote systems, Eridanus and Palomar 14, the radial velocity transformed to the galactic rest frame is large enough to suggest a total mass for the Galaxy of 10^{12} M₀, and a comparable mass is indicated from the average rest-frame velocities of the remote systems. A full presentation of the measurements and results will appear in the October 1, 1985, issue of the Astrophysical Journal.

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