

ANGULAR CORRELATIONS OF FAINT (B<24) GALAXIES.

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We investigate the two point angular correlation function, $\omega(\theta)$, of faint galaxy samples obtained from COSMOS machine measurements of 3.9m AAT plates. The area of sky used is the largest yet covered to very faint limits ($b_j < 24$ over 2.1 deg^2 and $r_F < 22$ over 1.4 deg^2). The power law slope of $\omega(\theta)$ is found to be consistent with a value of -0.8 at all depths in both passbands (see fig.1). The amplitudes measured by different authors show a large scatter in the blue passband (see fig.2). If this scatter also applied to the red passband (fig.3) we conclude that although a smaller clustering amplitude in the past is preferred, it is not possible to rule out the stable clustering model, and that models in which the clustering is co-moving may be inconsistent with the data.

Figs. 2 and 3. The observed and modelled amplitude scaling relations. The models assume galaxy luminosity evolution and, for the dashed lines, clustering evolution where the typical cluster scale factor varies as $(1+Z)^{-\beta}$.

