

ALIGNMENT EFFECTS OF BRIGHTEST CLUSTER GALAXIES

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We perform a test of reproducibility of the results of Argyres, et al. (A.J. 91, 3; 1986). Their conclusion is that there is marginal evidence for alignment of the brightest galaxies in rich Abell clusters in the northern galactic hemisphere with the surrounding large scale distribution of galaxies in the Lick map made by Seldner, et al. (A.J. 82, 249; 1977).

Our data consist of the positions and position angles of a sample of the brightest galaxies in southern Abell clusters with $z < 0.075$ and the southern Lick map. Following the Argyres, et al. algorithm, we are able to reproduce their alignment effects in this independent sample. Both the scale ($\sim 4^\circ \sim 15 h^{-1}$ Mpc; $H = 100 h$ km/sec/Mpc) and the amplitude of the alignment (defined by an anisotropy parameter in the cross correlation function) are in good agreement with the previous results.

This research was supported in part by the NSF, NASA, and CONICET.