

BLUE GALAXIES IN DISTANT CLUSTERS

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We analyzed – in terms of age and metallicity – the stellar content of blue galaxies in 3 distant clusters at $z \sim 0.3$. We found that they contain a more metal-rich population than nearby late-type spirals.

TABLE 1. Population synthesis results : contributions in % of the different generations of stars (Age, $[Z/Z_{\odot}]$) to the total galaxy flux

A typical nearby late-type spiral galaxy

		Age (yr)							
	%	HIIR	10^7	510^7	10^8	510^8	10^9	510^9	$> 10^{10}$
$[Z/Z_{\odot}]$	+0.6								3.57
	+0.3								3.98
	0.0								4.71
	-0.5	1.56	2.90	3.49	3.63	29.45	5.74	6.55	8.33
	-1.0								10.50
	-1.5								8.13
	-2.0								7.48

A group of blue galaxies in the cluster AC 114

		Age (yr)							
	%	HIIR	10^7	510^7	10^8	510^8	10^9	510^9	$> 10^{10}$
$[Z/Z_{\odot}]$	+0.6								13.96
	+0.3								11.64
	0.0	0.03	3.29	7.05	16.68	8.43	6.24	4.26	9.01
	-0.5								7.29
	-1.0								4.40
	-1.5								3.17
	-2.0								4.54