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Erratum: The *XMM* Large-Scale Structure survey: an initial sample of galaxy groups and clusters to a redshift $z < 0.6$

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The paper 'The *XMM* Large-Scale Structure Survey: An initial sample of galaxy groups and clusters to a redshift $z < 0.6$' was published in Mon. Not. R. Astron. Soc., **363**, 675-691. The values of bolometric luminosity computed within an aperture of radius r_{500} for each cluster, and the associated uncertainty, were obtained using fluxes that were not corrected for Galactic neutral hydrogen absorption. This error affects the results presented in Table 6 and Figs 5, 6 and 7, revised versions of which are presented here. The typical absorption correction per cluster results in a luminosity change of factor 1.5 and this results in a minor modification of our original conclusions.

In the original paper we compared the luminosity of the *XMM*–LSS group and cluster sample to local X-ray groups and clusters by means of a luminosity enhancement factor. The median luminosity enhancement factor of the clusters with reliable temperature information is now $F = 1.46$ (the previous value based upon unabsorbed luminosities was 1.09) – indicating that the systems we are observing are slightly brighter than the expectation for self–similar evolution from systems at $z = 0$ displaying the same temperature, i.e. $F_{ss} = 1.23$. However, we repeat the caveat that these initial trends require further confirmation within a larger, more complete sample, the compilation of which is currently underway.

Table 6. Spectral X-ray parameters determined for confirmed groups and clusters. Values for exposure time, t_{exp}, and total counts are summed over all three detectors. Where the letter 'F' follows a tabulated temperature (T) value, this indicates that the value was fixed in the fitting procedure. The definition of the aperture correction factor, A, is provided in the original paper text. Displayed errors are 1σ.

Cluster	t_{exp} seconds	total counts	r_{spec} arcsec	T keV	C–stat (per d.o.f.)	r_{500} Mpc	A	$L_{bol}(r_{500})$ $\times 10^{43}$ erg s^{-1}
XLSSC 006	17789	1943	82.5	$4.80^{+1.12}_{-0.84}$	0.85	0.809	1.29	44.8 ± 2.8
XLSSC 007	28094	138	90	1.5F	1.10	0.284	0.65	1.9
XLSSC 008	32358	94	60	$1.25^{+1.44}_{-0.38}$	1.04	0.393	1.62	0.8 ± 0.3
XLSSC 009	10709	112	90	$0.91^{+0.20}_{-0.17}$	1.12	0.292	0.93	2.0 ± 0.5
XLSSC 010	22635	505	67.5	$2.40^{+0.82}_{-0.53}$	1.00	0.539	1.50	6.5 ± 0.7
XLSSC 012	37726	635	60	$2.00^{+1.28}_{-0.51}$	1.20	0.462	1.52	4.5 ± 0.6
XLSSC 013	34383	133	35	$1.03^{+0.18}_{-0.25}$	0.92	0.437	1.38	0.9 ± 0.2
XLSSC 014	14801	286	50	1.5F	1.26	0.404	1.59	0.6
XLSSC 016	27202	25	30	1.5F	0.99	0.432	1.76	0.6
XLSSC 017	25506	79	30	1.5F	1.14	0.456	1.50	1.0
XLSSC 018	62573	295	45	$2.66^{+2.47}_{-0.91}$	1.40	0.558	2.32	1.8 ± 0.3
XLSSC 020	16770	61	37.5	1.5F	1.09	0.305	1.01	3.4

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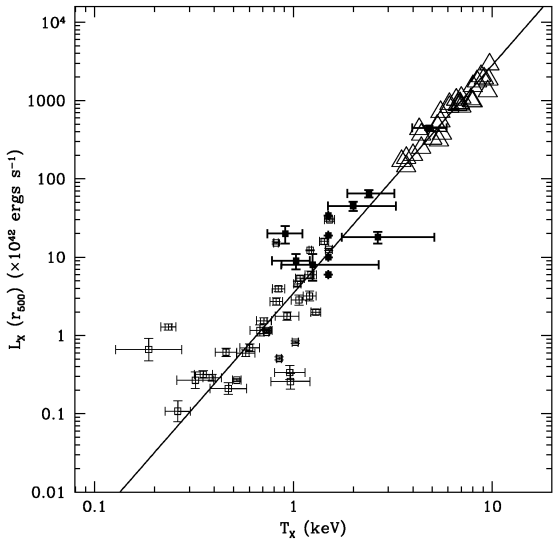

Figure 5. Distribution of X-ray luminosity computed within a scale radius r_{500} and temperature for all *XMM*–LSS groups and clusters currently identified at $z \leqslant 0.6$ (solid squares). Also indicated are values of X-ray luminosity and temperature determined for the low-redshift group sample of Osmond & Ponman (2004) (open squares) and for the cluster sample of Markevitch (1998) (open triangles). The solid line indicates an orthogonal regression fit to the L_X versus T_X relation for both the group and cluster sample incorporating a treatment of the selection effects present in each sample – see original paper text for details.

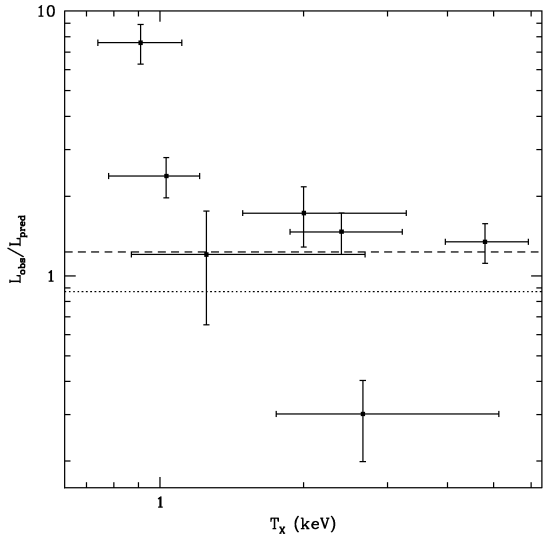

Figure 6. Enhancement factor, $F = L_{\rm obs}/L_{\rm pred}$, computed for six *XMM*–LSS groups and clusters located at $z \leqslant 0.6$ plotted versus the X-ray temperature of each system (see original paper text for additional details). Horizontal lines indicate expected values of F: the short dashed line indicates the value $F = 1.23$ expected from self–similar considerations. The dotted line indicates the value of F expected at $z = 0.4$ based upon Ettori et al. (2004).

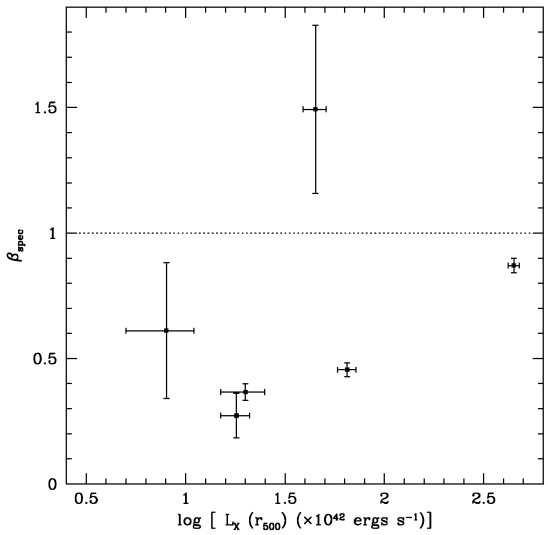

Figure 7. Values of $\beta_{\rm spec}$ computed for six *XMM*–LSS groups and clusters at $z \leqslant 0.6$ (see original paper text for details) plotted versus the X-ray luminosity for each system. The horizontal dashed line indicates the value $\beta_{\rm spec} = 1$.

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