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Maoz Figure 8.6



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A 3% SOLUTION: DETERMINATION OF THE HUBBLE CONSTANT WITH THE *HUBBLE SPACE TELESCOPE* AND WIDE FIELD CAMERA 3*

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$H_0=73.8\pm2.4$ km/sec-Mpc

Term	Description	Previous LMC	R09 N4258	Here N4258	Here All Three ^b
$\overline{\sigma_{\mathrm{anchor}}}$	Anchor distance	5%	3%	3%	1.3%
$\sigma_{anchor-PL}$	Mean of <i>P</i> – <i>L</i> in anchor	2.5%	1.5%	1.4%	$0.7\%^{c}$
$\sigma_{\rm host-PL}/\sqrt{n}$	Mean of <i>P</i> – <i>L</i> values in SN hosts	1.5%	1.5%	0.6 %	0.6%
$\sigma_{\rm SN}/\sqrt{n}$	Mean of SN Ia calibrators	2.5%	2.5%	1.9%	1.9%
σ_{m-z}	SN Ia <i>m</i> – <i>z</i> relation	1%	0.5%	0.5%	0.5%
$R\sigma_{\lambda,1,2}$	Cepheid reddening, zero points, anchor-to-hosts	4.5%	0.3%	0.0%	1.4%
σ_Z	Cepheid metallicity, anchor-to-hosts	3%	1.1%	0.6 %	1.0%
$\sigma_{\rm PL}$	$P-L$ slope, $\Delta \log P$, anchor-to-hosts	4%	0.5%	0.4%	0.6%
σ_{WFPC2}	WFPC2 CTE, long-short	3%	0%	0%	0%
Subtotal, σ_{H_0}		10%	4.7 %	4.0%	2.9%
Analysis systematics		NA	1.3%	1.0%	1.0%
Total, σ_{H_0}		10%	4.8 %	4.1%	3.1%

Table 5 H_0 Error Budget for Cepheid and SN Ia Distance Ladders^a