

Evaluation of the performance of polished mirror surfaces for the TAMA gravitational wave detector by use of a wave-front tracing simulation: erratum

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OCIS codes: 000.2780, 000.4430, 070.2590, 240.5450, 240.5770.

From the original paper by Tomaru *et al.*,¹ please note the following corrected information. On page 5913, the last sentence should read “Other interferometers, the VIRGO (Ref. 6) and the GEO (Ref. 7)

will also begin observations soon.” References 6 and 7 are referenced below as Refs. 2 and 3, respectively. On page 5917,¹ information in Table 5, should be displayed as follows:

Table 5. Numerical Results of the FFT Simulation of TAMA with a Recycling Mirror^a

	Design		Simulation			
			Without phase maps		With phase maps	
	Carrier	Sideband	Carrier	Sideband	Carrier	Sideband
Cavity reflectivity	—	—	0.9468 (0.9468)	—	0.9069 (0.9062)	—
Recycling gain	10	10 ^b	19	11	11	12
Contrast	99.5% ^b		99.4%		98.6%	
Shot-noise sensitivity Hz ^{-1/2c}	1.6 × 10 ⁻²²		1.1 × 10 ⁻²²		1.6 × 10 ⁻²²	

^aThe unparenthesized values are the total light power, and the parenthesized values are the TEM₀₀ mode light. The reflectivity of recycling mirror was optimized for the carrier beam in each calculation.

^bEstimation.

^cThe shot-noise sensitivity is at a frequency of 300 Hz.

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Received 11 December 2002.

0003-6935/03/071306-02\$15.00/0

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