

Predicting instabilities of a tunable ring laser with an iterative map model Requested Revisions v2

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- Align $b =$ with $s =$ in equation 25.
- The second lines of equations 27 and 35 should be further right, for example:

$$\sigma^2 = \sqrt{2}s \left(s^6 + 3s^2 + \sqrt{4 + s^4}(1 + s^4) \right)^{1/2} - s^4 - s^2 \sqrt{4 + s^4}. \quad (1)$$

- The two lines of equation 28 should be centred:

$$\tilde{g}(\tilde{A}) = \left(1 + \frac{P_0 T_M}{E_{\text{sat}}} \int_{-\infty}^{\infty} |\tilde{A}|^2 d\tilde{T} \right)^{-1}, \quad (2)$$

$$L_{\text{disp}} = \frac{T_M^2}{|\beta_2|}, \quad L_{\text{NL}} = \frac{1}{\gamma P_0}.$$

- The font size in equations 27 and 28 seems to have been reduced, please return to the normal size.
- Align figures 7 and 9.
- Most of the \exp , \log , W , and \mathcal{O} seem to have additional space before the parenthesis, please remove the extra space. For example, compare the $W(aE_g e^{E_g})$ terms in equations 33 and 38.

Please correct the size of the parentheses for:

- Exponential on second line of equation 24.
- Logarithm in equation 37.
- $\exp(g_0 L_g)$ in equation 9, 13, 25.
- \mathcal{O} in paragraph above equation 29 (two instances), and in Table 2.

I assume the additional space after the \exp and such is a consequence of increasing the size of the parentheses. Please ensure the above changes do not add additional spacing.