Title: Analysis of worm-like locomotion driven by the sine-squared strain wave in a linear viscous medium

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PII: S0093-6413(16)30095-7
DOI: http://dx.doi.org/doi:10.1016/j.mechrescom.2017.07.006
Reference: MRC 3191

To appear in:

Received date: 14-8-2016
Revised date: 8-3-2017
Accepted date: 21-7-2017

Please cite this article as: Ziwang Jiang, Jian Xu, Analysis of worm-like locomotion driven by the sine-squared strain wave in a linear viscous medium, *<![CDATA[Mechanics Research Communications]]>* (2017), http://dx.doi.org/10.1016/j.mechrescom.2017.07.006

The paper's highlights are listed as follows

1. The full dynamic model of one-dimensional worm-like locomotion is developed.
2. The effect of parameters such as friction coefficient, wave speed, linear density and body length on worm-like locomotion is studied.
3. The reduced condition of the dynamic model is presented based on the relative error criterion in the case of the SSSW.
4. A reduced model named quasi-static model is utilized to obtain the condition in which the system driven by SSSW outweighs that driven by SSW. Then the results are verified by numerical simulation.