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A multi-algorithm, multi-timescale method for cell simulation

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ABSTRACT

Motivation: Many important problems in cell biology require the dense nonlinear interactions between functional modules to be considered. The importance of computer simulation in understanding cellular processes is now widely accepted, and a variety of simulations algorithms useful for studying certain subsystems have been designed.

1 INTRODUCTION

The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog..

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* To whom cirrespondence should be addressed.

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2 INTRODUCTION THIS IS HEADING 1 STYLE

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2.1 Data Structure This is Heading 2 style this is heading 2 style

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3.4.2 Driver algorithm This is heading 3 style The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog.

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2.2 Unnumbered list style

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$$Pr(\mu) = a_{\mu} \Big/ \sum_{j} a_{j} \tag{17}$$

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Fig. 1. Relation between τ and *t*. This example has only two continuous Steppers, S_1 and S_2.

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Table 2. Benchmark results of the cascade oscillators model

|S|	Predicted cost	Timing	Predicted speed	Speed
1	S219.20(100%)	68m43s	1.00	1.00
2	2^9.10+2^{19}.10(~50%)	35m13s	2.00	1.95
4	2^{19}.20(100%)	68m43s	1.00	1.00
10	2^9.10+2^{19}.10(~50%)	35m13s	2.00	1.95
20	2^{19}.20(100%)	68m43s	1.00	9.5

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ACKNOWLEDGEMENTS

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