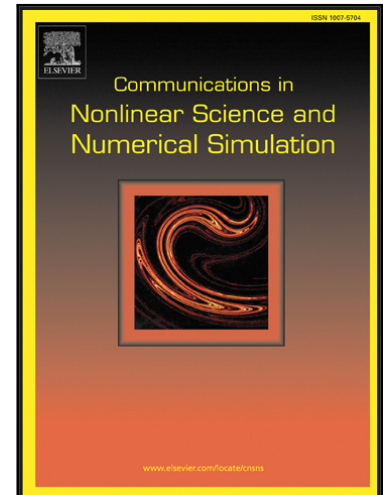


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Corrigendum to “On the computation of the multidimensional Mittag-Leffler function”

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Highlights

- we propose two methods for computing the multidimensional Mittag-Leffler function;
- the methods are based on an integral formulation and the fast Fourier transform;
- numerical simulations compare both methods and show their effectiveness.

ACCEPTED MANUSCRIPT

Corrigendum to “On the computation of the multidimensional Mittag-Leffler function”

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In the paper entitled “On the computation of the multidimensional Mittag-Leffler function” there is an error that originates some misleading nomenclature and results. The phrase in section 2, page 2, three lines after equation (4), should be written as follows:

“As the Laplace transform (LT) of $\frac{t^{\alpha_i+\beta-1}}{\Gamma(\alpha_i+\beta)}\varepsilon(t)$, $i = 1, 2, \dots, N$, is given by $s^{-\alpha_i-\beta}$, $\text{Re}(s) > 0$ [6], we introduce a diagonal matrix, $\mathbf{D}(s^\alpha) = \text{diag}([s^\alpha]) = \text{diag}([s^{\alpha_1}, \dots, s^{\alpha_N}])$, $\alpha = [\alpha_1, \dots, \alpha_N]$, to obtain the LT of the M-MLF, $c_{\alpha,\beta}(t)$, from:

$$\mathcal{L}[t^{-\beta+1}c_{\alpha,\beta}(t)] = C_{\alpha,\beta}(s) = s^{-\beta} \sum_{n=0}^{\infty} \mathbf{P}^n \mathbf{D}(s^{-n\alpha}).”$$

This means that the computations with $\beta \neq 1$ represent the inverse Laplace transform of $C_{\alpha,\beta}(s)$ instead of that of the Mittag-Leffler function.

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