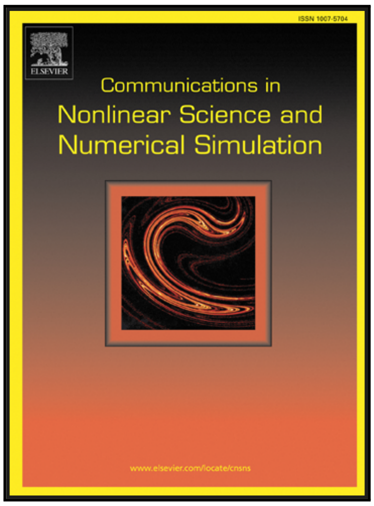

Corrigendum to “On the computation of the multidimensional Mittag-Leffler function”

Manuel D. Ortigueira, António M. Lopes, J.A.Tenreiro Machado

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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.

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Manuel D. Ortigueira

UNINOVA and DEE of Faculdade de Ciências e Tecnologia da UNL, Campus da FCT da UNL, Quinta da Torre, 2829–516 Caparica, Portugal

Email: mdo@fct.unl.pt

António M. Lopes

UISPA–LAETA/INEGI, Faculty of Engineering, University of Porto, Rua Dr. Roberto Frias, 4200–465 Porto, Portugal

Email: aml@fe.up.pt

J. A. Tenreiro Machado

Institute of Engineering, Polytechnic of Porto, Dept. of Electrical Engineering, R. Dr. António Bernardino de Almeida, 431, 4249–015 Porto, Portugal

Email: jtm@isep.ipp.pt

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 written as follows:

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

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

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.

[1]Corresponding author
António M. Lopes
Faculty of Engineering, University of Porto
Rua Dr. Roberto Frias, 4200-465 Porto, Portugal
Email: aml@fe.up.pt