

Accepted Manuscript

Analytical and Numerical solutions of a nonlinear alcoholism model via variable-order fractional differential equations

J.F. Gómez-Aguilar

PII: S0378-4371(17)31250-5
DOI: <https://doi.org/10.1016/j.physa.2017.12.007>
Reference: PHYSA 18937

To appear in: *Physica A*

Received date: 25 August 2017
Revised date: 26 October 2017

Please cite this article as: J.F. Gómez-Aguilar, Analytical and Numerical solutions of a nonlinear alcoholism model via variable-order fractional differential equations, *Physica A* (2017), <https://doi.org/10.1016/j.physa.2017.12.007>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Highlights

The Liouville-Caputo and Atangana-Baleanu-Caputo fractional derivatives with variable-order are applied to alcoholism model with the impact of Twitter.

New complex dynamics are obtained with the application of these fractional derivatives.

Special solutions using an iterative scheme via Laplace and Sumudu transform were obtained.

Download English Version:

<https://daneshyari.com/en/article/7376197>

Download Persian Version:

<https://daneshyari.com/article/7376197>

[Daneshyari.com](https://daneshyari.com)