



Zeraoulia Rafik

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WORK EXPERIENCE

ZERAOULIA RAFIK, *R&D Mathematics*

Nov 1985

Zeraoulia Rafik born November 05, 1985 in Yabous, Algeria, received his Master2. in Mathematics from the University of Batna in 2014. His primary research interests include bifurcations and chaos, Mathematics and probability ,statistics also number theory. He has authored more than 3 journal and 5 conference papers and 1 book about international olympiad . He reviewed more than 6 papers one of them in Nolineare dynamics journal (web of science),He Authored more that 8 papers in Arxiv,He has 8 sequences in OEIS which actually called Zeraoulia Sequences



PHD , *R&D Mathematics*

Sep 2020 - Feb 2016

University of batna2.Algeria, Teacher of mathematics at high school Batna.



RESEARCHER IN DYNAMICAL SYSTEM AND NUMBER THEORY,PROBABILITY AND STATISTICS , *Collaborator*

From Feb 2008 even now

IMG/mcdonalds

STACKEXCHANGE MATH AND MATHOVERFLOW, *Moderator*

Jul 2015

Improving questions and editing .

PAPERS AND PUBLICATIONS

1. Zeraoulia Rafik, Alvaro H. Salas, David L. Ocampo, "A New Special Function and Its Application in Probability", International Journal of Mathematics and Mathematical Sciences, vol. 2018, Article ID 5146794, 12 pages, 2018. <https://doi.org/10.1155/2018/5146794> <https://doi.org/10.1155/2018/5146794>
2. Zeraoulia Rafik ,Alvaro Salas ,A note on open conjecture in rational dynamical system ,Journal of Numerical Mathematics and Stochastics, 13 (1) : 57-67, 2022. <http://www.jnmas.org/jnmas13-3.pdf>
3. Zeraoulia Rafik ,Amazing behavior and transition to chaos of some sequences using Collatz like problems and Quibic duffing ,arXiv:2302.01904,<https://arxiv.org/abs/2302.01904> ,(Accepted for publication Wsj)
4. Zeraoulia Rafik and Alvaro Humberto Salas,Chaos analysis in the un-perturbed system for Quintic Duffing equation,arXiv:2212.12438,<https://arxiv.org/pdf/2212.12438>
5. Zeraoulia Rafik, Alvaro humberto Salas, Lorenzo Martinez,On the Boundedness solutions of the difference equation $x_{n+1} = ax^n + bx^{n-1}$, $0 < \alpha \leq 2$ and its application in Medicine,arXiv:2211,<https://arxiv.org/pdf/2211.16969>
6. Zeraoulia Rafik ,Smoothness and analyticity of $f' = \exp(f^{-1})$,arXiv:2211.12840,<https://arxiv.org/pdf/2211.12840>
7. Zeraoulia Rafik and Alvaro Humberto Salas , Iterating sum of power divisor function and New equivalence to the Riemann hypothesis,arXiv:2209.13010 ,<https://arxiv.org/pdf/2209.13010>
8. Zeraoulia Rafik ,Does the Zeraoulia Sequences Converges?,arXiv:2201.00643,<https://arxiv.org/pdf/2201.00643>
9. Zeraoulia Rafik,On congruence of the iterated form ${}^k(m) = 0 \pmod m$
10. Zeraoulia Rafik, A note on an open conjecture in rational dynamical system (first version before acceptance in journal),arXiv:2101.07796 ,<https://arxiv.org/pdf/2101.07796>

11. Zeraoulia Rafik , Olympiad math for arabic countries ,ISBN:978-9931-791-59-1
12. Zeraoulia Rafik, open problems in number theory ,Scilag,<https://www.scilag.net/profile/rafik-zeraoulia>
13. Zeraoulia sequences in OEIS, <https://oeis.org/search?q=R+zeraoulia+&sort=&language=&go=Search>

CONFERENCES

1. A New Special Function and Its Application in Probability using mathematica ,<https://www.wolfram.com/events/technology-conference-br/2019/presentations/>
2. International conference of special function ,India,(ICSFA-2021)
3. International conference of number theory , India (ICSFA-2018)
4. International conference of mathematics and its application ,Mesila, Algeria
5. International conference of applied mathematics , university of Florida ,A note on open conjecture in rational dynamical system ,2021.

EXTERNAL LINKS






<https://mathoverflow.net/users/51189/zeraoulia-rafik>

<https://math.stackexchange.com/users/156150/zeraoulia-rafik>

<https://www.researchgate.net/profile/Rafik-Zeraoulia-2>

<https://www.facebook.com/groups/4110040445689555>

SKILLS & INTERESTS

-  Native Speaker ,English language , Russian ,arabic ,French
-  Professional user in latex Editor
-  Professional user of Matlab and mathematica
-  Conversational level excellent in English and arabic and french
-  Conversational level good in Russian and french