

Review Form 3

Journal Name:	Journal of Advances in Mathematics and Computer Science
Manuscript Number:	Ms_JAMCS_123582
Title of the Manuscript:	Stability Analysis of the Chaotic Reverse Butterfly-Shaped Dynamical System Using Hurwitz Polynomials
Type of the Article	

General guidelines for the Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<p>The article provides a clear theoretical framework for analyzing chaotic systems using Hurwitz polynomials and Routh-Hurwitz stability criteria. The numerical simulations corroborate the theoretical stability findings, which adds validity to the results. Overall, the article contributes significantly to analyzing chaotic systems, particularly by applying Hurwitz polynomials in determining system stability. However, careful proofreading and restructuring would make the paper more accessible to a broader audience.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>Yes</p>	
<p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>Yes, the abstract of the article is comprehensive</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Yes</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>Line N0.3 in the Introduction is meaningless. In section 2, lines after equations 2.1 and 2.2 are not clear. Please check line no1 in Section 3. The author has obtained a time series plot along with the Lyapunov exponent but could not correlate each other. Where is the system (3.7) as mentioned on page no. 6? Please revise the article with special emphasis on spelling, equation nos, and figures.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>More references with current publications can be added.</p>	
<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>Language quality needs improvement.</p>	
<p>Optional/General comments</p>	<p>Numerous typographical and grammatical errors detract from clarity, such as inconsistent wording and sentence structure. For example, "solvusing" should be corrected to "solving using," and "asssymptotically stable" should be corrected to "asymptotically stable." Some sections are repetitive and could benefit from clearer organization, particularly in distinguishing between background information. Explicit clarification of certain notations (like what "c" represents) would enhance readability for those unfamiliar with the system under study.</p>	

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PART 2:

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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