Type of the Paper (Research Article, Review, Communication, Letter, etc.)

Title: Journal of Mathematical Sciences

Firstname Lastname 1, Firstname Lastname 2 and Firstname Lastname 2,\*

|  |
| --- |
| **Citation:** Citations will be added by editorial staff during production.  Academic Editor: Firstname Lastname  Received: date  Accepted: date  Published: date  **Publisher’s Note:** Insibidi will remain neutral with any claims to jurisdictional published maps and institutional affiliations.    **Copyright:** © 2023 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/). |

1 Affiliation 1; e-mail@e-mail.com

2 Affiliation 2; e-mail@e-mail.com

**\*** Correspondence: e-mail@e-mail.com; Tel.: (optional; include country code; for multiple corresponding authors, add initials of author)

**Abstract:** An abstract of between 150 to 250 words is required. Authors should provide in the abstract a context to the paper and a concise summary of the work being presented for publication. Authors are strongly encouraged to present structured abstracts which should include the background to the paper. The abstract also need to answer which technical questions are being addressed and the purpose of the current study. Next, present the main methods used in the research, then summarise the results and main findings. Finally provide the main conclusions and interpretations of the results in the paper. Any results not presented in the body of the paper need not be included. Avoid claims which are not substantiated by the content of the paper.

**Keywords:** keyword 1; keyword 2; keyword 3 (List three to ten essential keywords specific to the article which are reasonably common to assist search engines and within the subject discipline.)

0. How to Use This Template

*This section is for instructions only and should be removed to permit numbering the sections from 1. Authors may request support, if necessary, from the editors of this journal.*

This template provides details of the sections that may be used in the manuscript. Not all sections are mandatory. If they do not fit the paper, there is no need to include them. Note that each section has an appropriate style, which is embedded in the “Styles” menu of Microsoft Word. Authors who use latex need to pay attention to ensuring a style which adheres to this requirement. Titles given to the sections should reflect in most cases to the article in question. While section titles like “Introduction” may be common and apply to most papers, other section titles need to be provided by authors to reflect the contents of the paper. Therefore, flexibility is built into the structure of the paper to permit types of papers to be submitted to the JoMS.

1. Related Work

This section on “Related Work” is an introduction. It should be used to establish in broad context why the study in this paper is important. It should be used to define the rationale and purpose and to respond to why this work is significant. Next it should present in clear context related work to the topic of this study through searching current literature in the research field. Present the current state of art in this research field through articles cited in the paper.

Where there are controversial and diverging opinions and hypotheses include them and why such views are relevant to the context of the paper. Where a paper has no real strategic contribution to make to this work, there should also be no reason why such as articles are included. The aim is not to boost the list of cited works, but rather to provide context and relevancy to this work. Finally, in a few sentences highlight the principal aim of this work and the main conclusions. As an objective if and where the reviewed papers have helped to establish gaps in the field of study covered by this work to also indicate such gaps and how this paper plugs some or such gaps. Ensure that the review section is understandable by scientists in and outside the field of research covered by the paper. Number the references in order of appearance using numerals in square brackets—for example., [1] or [2,3], or [4–6]. Refer to the end of this document for further details on references and how papers should be cited.

2. Proposed Methods and Materials

Describe the Proposed Methods and Materials in sufficient detail to enable replication of results in this work. Avoid being verbose without providing “how” the research in this paper was conducted, “which models” are being proposed, which materials are used and the approach to simulations and experiments. In doing so the objective should be to enable others to replicate and build on the results in this paper. In publishing your articles, other authors might request data, program code, materials and the approach adopted in the manuscript. Publishing your manuscript therefore implies that you have described the new ideas, new methods and results in the paper and agreed to make available when requested by other authors such things as source codes, data, materials or details of equipment that could support other researchers to build on your published work. Any proprietary restrictions on providing such materials need to be disclosed when the paper is submitted for review.

Studies which depend on bio-diversity restrictions, animals and humans and require ethics approvals require authors to provide ethical approval authorities and approval codes prior to publication.

Manuscripts in which a significant amount of data sets are used or created are required to provide information on where such data sets may be obtained and any permissions required and who among the authors is responsible for providing access to such data sets. Access permissions and how to secure them must be provided prior to publishing the manuscript.

3. Results

This section may be divided by subheadings. It should provide a concise and precise description of the experimental results, their interpretation, as well as the experimental conclusions that can be drawn.

3.1. Subsection

3.1.1. Subsubsection

Bulleted lists look like this:

* This is first bullet;
* This is second bullet;
* This is third bullet;
* This is fourth bullet.

Continue the bullet lists where necessary.

Authors may also use numbered lists which may be added as follows:

Add numbered lists in this form:

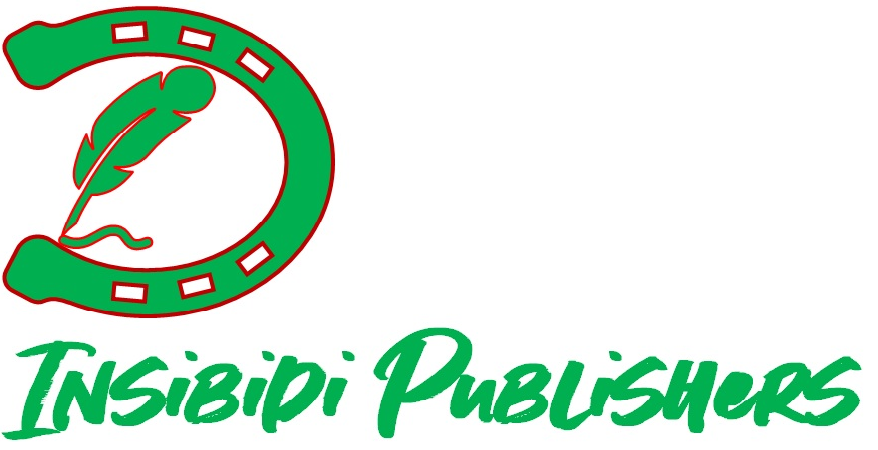
1. First item;
2. Second item;
3. Third item;
4. Fourth item.

Continue the numbered lists where necessary.

3.2. Figures, Tables and Schemes

Figures and tables must be cited and numbered sequentially in the main text in the form Figure 1, Table 1, etc. Do not mix using Figure and Fig. Spell the word in full. The word “Figure” refers to the name of the figure.

***Captions for all figures in the paper must be placed right below the figures. They also must be placed close to where they are first mentioned in the manuscript.***

****

**Figure 1.** This is Insibidi Logo.

***Captions for all the tables on the paper must be placed immediately above the figures.***

**Table 1.** This is Table 1. Place tables in the main text near to where they are first mentioned in the manuscript.

|  |  |  |
| --- | --- | --- |
| **Title 1** | **Title 2** | **Title 3** |
| First entry | data | data |
| Second entry | data | data 1 |

1 Footers allowed in tables.

The text continues here (Figure 2 and Table 2).

|  |  |
| --- | --- |
|  | A picture containing text, clipart  Description automatically generated |
| (**a**) | (**b**) |

**Figure 2.** This is Figure 2. If there are multiple figures, they must be listed as: (**a**) Caption of what is contained in the first sub-figure; (**b**) Caption of what is contained in the second sub-figure.

**Table 2.** This is Table 2. Table captions must be placed on top of the table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Heading 1** | **Heading 2** | **Heading 3** | **Heading 4** |
| Item 1 | data  digit  data  digit | data  digit  data  digit | data  digit  data  digit |
| Item 2 | data  digit  data  digit | data  digit  data  digit | data  digit  data  digit |
| Item 3 | data  digit  data  digit | data  digit  data  digit | data  digit  data  digit |
| Item 4 | data  digit  data  digit | data  digit  data  digit | data  digit  data  digit |
| Item 5 | data  digit  data  digit | data  digit  data  digit | data  digit  data  digit |

3.3. Format of Mathematical Equations and Expressions

Type the equations using an equation editor such as MathType or Equation in Microsoft Word. This is equation (1):



|  |
| --- |
| Right justify all equations in the paper and ensure they all have distinct numbers. Refer to equations in the paper by their numbers such as (1) which refers to a complex root of unity. |

This also is an equation:



Theorem-type environments (including propositions, lemmas, corollaries etc.) can be formatted as follows:

**Theorem 1:** Number Theorems, propositions, lemmas, etc. sequentially.

**Proof of Theorem 1:** Locate proofs to theorems where it fits best in the manuscript and finish each proof with the symbol. **□**

4. Discussions

Authors are required to discuss the main findings of their work by providing insight and explanations on what the results in the paper mean and what inferences could be drawn from them. Where hypotheses have been proposed, the discussions section should explain if each of the hypotheses is sustained or not. In a nutshell, interpret the results in the paper to inform readers of the meanings of the results, how they differ from previous similar works. Suggest future research directions from this work.

5. Conclusions

This section is essential and is different from what is included in the discussion section of the paper. It should contain a few sentences detailing the main take-home results from the work contained in the paper being published.

**Further Information**

Abbreviations

Define abbreviations on first mention and thereafter use it consistently. The full words for an abbreviation should come first. For example, in quantum Fourier Transform (QFT) is a properly framed abbreviation to be used when describing Shor’s algorithm for QFT.

#### Footnotes

Footnotes can be used to give additional information, which may include the citation of a reference included in the reference list. They should not consist solely of a reference citation, and they should never include the bibliographic details of a reference. They should also not contain any figures or tables.

Footnotes to the text are numbered consecutively; those to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data). Footnotes to the title or the authors of the article are not given reference symbols.

Always use footnotes instead of endnotes.

#### Acknowledgments

Acknowledgments of people, grants, funds, etc. should be placed in a separate section on the title page. The names of funding organizations should be written in full.

6. Patents

This section is optional. Add it only if there are patents resulting from the reported contents of the paper in this manuscript.

**Supplementary Materials: Include any supplementary materials in the form**: Video S1: title; Table S1: title; Figure S1: title.

**Data Availability Statement:** Provide details through whom and where data supporting reported results can be found. Provide links to publicly available archived datasets used or created during the study.

**Author Contributions:** If this research article has several authors, provide a short statement which specifies individual contributions such as (data, experiments, conceptualization, methodology, data curation, writing, review and editing, software, validation, resources including finance, supervision of project and include full names of those contributing each of the items. Add another sentence showing that all the authors on the manuscript have agreed to provide the article for publication.

**Funding:** If the research received any funding, include an accurate statement on funding of the form – “This research was funded by XXX (the name of the funding agency)” or add: “This research received no external funding”

**Institutional Review Board Statement: Many organisations provide Institutional Review Boards.** In this section, add the Institutional Review Board Statement and approval number (if any). Also state if the research did not require ethical clearance. Check if your Review Board wants to clarify their permission through an added statement from them.

**Informed Consent Statement: For research articles originating from studies involving human beings include statements of the form:** “Consent was sought and obtained from all subjects involved in the study.” or “Consent was waived by YYY due to the following reason (and provide a detailed justification).” or “Not applicable.” for studies which do not involve humans.

**Acknowledgments:** Acknowledge any contributions and support given which are not covered by the funding or author contribution sections. Include administrative and technical support received, or in-kind donations (e.g., time and materials used for experiments).

**Conflicts of Interest:** Declare conflicts of interest and state “The authors declare no conflict of interest.” Authors are required to identify and declare any personal interests and circumstances or interest that may be viewed to have inappropriately influenced the description, representation or interpretation of reported data and research results. Declare any role of the funding agencies or persons in the design of the study; data gathering, analyses and interpretation of data and results. Declare if such agencies have contributed to the decision to publish results and in the writing of the manuscript. If there are no roles, state “The funders of this research had no role in the decision to publish this research, not in the design of the study; not in data collection, analyses, or interpretation of data and results”.

**Appendix 1**

Number all appendices numerically. This is an optional Appendix 1. It contains detailed proofs and axioms used in the paper. It also provides supplemental data to the main manuscript. Add any other text description in relation to this appendix.

**Appendix 2**

Cite all the appendices in the body of the manuscript where they fit most. All appendix sections must be cited in the main text. In the appendices, continue numbering the Figures, Tables from where they ended in the main manuscript.

References

All references must be numbered sequentially in order of appearance in the text (including citations in Figures, Tables and legends). They must also be listed individually at the end of the manuscript using the IEEE referencing format. Several commercial and opensource referencing software packages may be used including Zotero, EndNote or ReferenceManager. Where available, include the digital object identifiers (DOI) for all references. Citations and references in the Supplementary Materials should also appear in the reference list.

In the text, reference numbers should be placed in square brackets [ ] and placed before the punctuation; for example [1], [1–4] or [1,4]. For embedded citations in the text with page numbers, use both parentheses and brackets to indicate first the reference number and then page numbers; for example [5] (p. 14), or [8] (pp. 211–230).

***Basic Format:***

*The name of the first authors must appear in full.*

[1] Johnson I. Agbinya (book), "Wireless Power Transfer 2nd Edition," in Wireless Power Transfer 2nd Edition, River Publishers, 2016, pp.i-lviii.

[2] Johnson I. Agbinya, "Fast interpolation algorithm using fast Hartley transform," in Proceedings of the IEEE, vol. 75, no. 4, pp. 523-524, April 1987, doi: 10.1109/PROC.1987.13762.

[3] Kenneth. E. Okedu, "Smoothing of Wind Farms for Frequency Regulation using DFIG Flywheel and FACTS Strategies," 2022 IEEE 31st International Symposium on Industrial Electronics (ISIE), Anchorage, AK, USA, 2022, pp. 442-447, doi: 10.1109/ISIE51582.2022.9831509.

[4] Patrick. U. Okorie, A. Abdu Ibraim and D. Auwal, "Design and Implementation of an Arduino Based Smart Home," 2020 International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA), Ankara, Turkey, 2020, pp. 1-6, doi: 10.1109/HORA49412.2020.9152922

[5] Anwar Vahed and C. W. Omlin, "Rule extraction from recurrent neural networks using a symbolic machine learning algorithm," ICONIP'99. ANZIIS'99 & ANNES'99 & ACNN'99. 6th International Conference on Neural Information Processing. Proceedings (Cat. No.99EX378), Perth, WA, Australia, 1999, pp. 712-717 vol.2, doi: 10.1109/ICONIP.1999.845683.

[6] Sara Lal, S. J. Lal, P. Fisher, T. Penzel and J. Agbinya, "Brief overview of technology and applications in railway operator safety," 7th International Conference on Broadband Communications and Biomedical Applications, Melbourne, VIC, Australia, 2011, pp. 252-258, doi: 10.1109/IB2Com.2011.6217930.