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| Book Name: | **Computation of Binary Star Orbits** |
| Manuscript Number: | **Ms\_BPR\_5486** |
| Title of the Manuscript: | **Computation of Binary Star Orbits** |
| Type of the Article | **Complete Book** |

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | This manuscript is vital for accurately determining the motion and parameters of binary star systems. It enhances our understanding of stellar masses and dynamics, which are key to studying stellar evolution. Precise orbit computation also supports gravitational wave research and distance calibration methods. Overall, it provides essential tools for advancing astrophysical and cosmological studies. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | **Yes** |  |
| 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. | **Yes** |  |
| **Is the manuscript scientifically, correct? Please write here.** | Yes, the manuscript is scientifically correct as it employs established mathematical and computational methods for determining binary star orbits. It aligns with current astrophysical models and uses observational data effectively. The methodology and results are consistent with accepted practices in orbital mechanics. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.**  **-** | References are sufficient but I suggest you to add few more recent additional references. |  |
| Is the language/English quality of the article suitable for scholarly communications? | Yes |  |
| Optional/General comments |  |  |

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| **PART 2:** | | |
|  | Reviewer’s comment | Author’s comment *(if agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?** |  |  |

**Reviewer details:**

**Swetha. N, University Of Madras, India**