Joint constraints on relativistic jets from neutron star mergers

A thesis submitted

in partial fulfillment for the award of the degree of

Master of Science

in

Astronomy and Astrophysics

by

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Certificate

This is to certify that the thesis titled ***Joint constraints on relativistic jets from neutron star mergers*** submitted by **B.S.Bharath Saiguhan**, to the Indian Institute of Space Science and Technology, Thiruvananthapuram, in partial fulfillment for the award of the degree of **Master of Science** in **Astronomy and Astrophysics** is a bona fide record of the original work carried out by him/her under my supervision. The contents of this thesis, in full or in parts, have not been submitted to any other Institute or University for the award of any degree or diploma.

Dr. Resmi Lekshmi
Designation

Name of Department Head
Designation

Place: Thiruvananthapuram
Date: May 11, 2021

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I declare that this thesis titled ***Joint constraints on relativistic jets from neutron star mergers*** submitted in partial fulfillment for the award of the degree of **Master of Science** in **Astronomy and Astrophysics** is a record of the original work carried out by me under the supervision of **Dr. Resmi Lekshmi**, and has not formed the basis for the award of any degree, diploma, associateship, fellowship, or other titles in this or any other Institution or University of higher learning. In keeping with the ethical practice in reporting scientific information, due acknowledgments have been made wherever the findings of others have been cited.

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B.S.Bharath Saiguhan
(SC16B123)

This thesis is dedicated to ...

Acknowledgements

I acknowledge ...

B.S.Bharath Saiguhan

Abstract

Abstract here.

Contents

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Abbreviations

GNU	GNU's Not Unix
EMACS	Editor MACroS

Nomenclature

m	Mass of the object
c	Velocity of light

Chapter 1

Introduction

Sample code for including figures, tables, algorithms, and citations are listed here.

1.1 Including Figures

Figure 1.1: Sample figure

1.2 Including Algorithms

Algorithm 1.1: Sum of N numbers

```
1 S = 0
2 for i = 1 : N do
3 |   S = S + i
4 end
5 Ouput S
```

1.3 Including Tables

In this section, Table 1.1 is explained.

Table 1.1: Sample table

Parameter	x	y
ABC	2	4
DEF	3	9

1.4 Theorem, Proof, Lemma, Corollary, Proposition, and Conjecture

Theorem 1.1. *This is my first theorem.*

Proof. This is my proof. □

Lemma 1.1. *This is a content for sample lemma.*

Corollary 1.1. *This is a sample corollary.*

Proposition 1.1. *This is an example of proposition.*

Conjecture 1.1. *This is an example of conjecture*

1.5 Definition, Condition, Assumptions, Examples, and Problems

Definition 1.1. An example of a definition.

Condition 1.1. An example of a condition.

Assumption 1.1. You assumptions can be placed here.

Example 1.1. This is an example.

Problem 1.1. Problem statements can be put here.

1.6 Remarks, Claims, and Notes

Remark 1.1. Your remarks can be written using this environment.

Claim 1.1. Claims can be made using claim environment.

Note. An example note.

1.7 Citations

Sample citation [1].

1.8 Indexing

LaTeX is a type setting system written in TeX language. LaTeX is a free software originally developed by Leslie Lamport in 1980s.

Chapter 2
Related Work

Write related work here.

2.1 Summary

Chapter 3
Conclusions

Conclusions here.

References

1. Lamport, L. *LATEX: a document preparation system: user's guide and reference manual* (Addison-wesley, 1994).

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