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Universidade de São Paulo

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Instituto de Astronomia, Geofísica e Ciências Atmosféricas

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An [unofficial] IAG/USP template for

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dissertations and thesis

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An [unofficial] IAG/USP template for dissertations and thesis**Versão original**

Dissertação/Tese apresentada ao Instituto de Astronomia, Geofísica e Ciências Atmosféricas da Universidade de São Paulo como requisito parcial para a obtenção do título de Mestre/Doutor em Ciências.

Área de concentração: Astronomia

Orientador: Prof. Dr. Nome.

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Agradecimientos

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18 Agradecimientos

21 Resumo

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22 Resumo em português.

23 **Palavras-chave:** palavras-chave em português

25

Abstract

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26 Abstract in english.

27 **Keywords:** keywords in english

29

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52 **photo- z** photometric redshift

53 **S-PLUS** Southern Photometric Local Universe Survey

54 **spec- z** spectroscopic redshift

1 Introduction

The goal of this document is to provide an unofficial dissertation/thesis template for IAG/USP.

1.1 | General tips for when writing a dissertation/thesis

When writing the text, you should be aware of the IAG/USP norms¹. There are obligatory chapters that should be in the text, they are:

- Cover
- “Folha de rosto”
- List of figures, illustrations, tables
- Introduction
- Methodology
- Results
- Conclusions
- Future perspectives
- Bibliography
- Appendices (optional)
- Attachments (optional)

In order to make the deposit, you should have:

- For PhD: a printed copy of the text, the forms containing the committee suggestion, a letter from the supervisor saying that you are fit for the defense, and proof of one published paper, where you are the first or second co-author, in a refereed international journal. You also need to make a deposit in Janus.

¹<https://leginf.usp.br/?resolucao=resolucao-copgr-no-7882-de-25-de-novembro-de-2019>

IAG has a partnership with the IME’s print shop. To print your dissertation/thesis with them you should send an email to ccpastroiag.usp.br with copy to cida.coelho@iag.usp.br asking for permission, with the PDF of the text attached. If approved, the text will be sent to the print shop and you will be notified when it is ready (within 1 or 2 days).

The forms for the committee and the supervisor manifestation can be found at IAG’s website, in the “Forms” page: <https://www.iag.usp.br/pos-graduacao/formularios>. I recommend that you start thinking about the names that should be in your defense two weeks before making the deposit, and sending each member an email one week before, asking if they accept that their names be suggested.

1.2 | Features of this template

This template is based on the [WebLatex²](#) template, created to replace Overleaf using Github, with some modifications. See the link for further details and the advantages of this approach.

1.2.1 | Acronyms

The acronyms in this model are handled by the `acro` package, where you need to defined the acronyms beforehand, in the “Sections/0.2-list_of_acronyms.tex”, using the format:

```
1 \DeclareAcronym{acronym}{
2   short = short name,
3   long  = long name,
4   cite  = citation %optional
5 }
```

Using this package, the first reference to an acronym is written normally, with the reference if you defined the acronym with one, using the “long” name: Southern Photometric Local Universe Survey (S-PLUS, [Mendes de Oliveira et al., 2019](#)). Whenever you make another reference to this acronym, it will use the “short” name: S-PLUS.

You can also define acronyms using math-mode: photometric redshift (photo- z). If you use the acronym only once, it will be printed using the long form only, without displaying the short form, in this case, use can use the `ac{acro}` command followed by `acuse{acro}`: spectroscopic redshift (spec- z).

There are some variations on how the acronyms can be printed, such as:

- Plural: `\acp{photoz}` → photo- zs
- Force long name: `\acl{des}` → Dark Energy Survey ([Sánchez, 2010](#))

²<https://github.com/sanjib-sen/WebLaTeX>

110 – Force short name: `\acs{vhs}` → VHS (McMahon et al., 2013)

111 – Capital first letter: `\Ac{photoz}` → Photo-*z*

112 1.2.2 | Citations

113 In this template, the citations are handled by the `natbib` package, which is defined by the
114 commands in the “Sections/6-bibliography.tex” file. There, the list of used references are imported
115 from the “Sections/reference_list.bib” file.

116 This package supports different types of citations, all of them explained here: [https://](https://gking.harvard.edu/files/natnotes2.pdf)
117 gking.harvard.edu/files/natnotes2.pdf

118 1.2.3 | Examples of tables, figures, listings...

119 1.2.4 | Making figures with Matplotlib

2 Data acquisition and preparation

3 Results: Photometric redshifts

122 4 Conclusions

5 Future perspectives

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A Appendix
