The `coppe` document class
Version 3.5.1

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February 14, 2025

Abstract

In this work, it is described the `coppe` document class as well as other files distributed by the CoppeTeX project. This class is suitable for writing academic dissertations, thesis and qualifying exams according to the formatting rules of the Alberto Luiz Coimbra Institute for Graduate Studies and Research in Engineering. The minimalist set of macro commands allows its users to concentrate most of their efforts on text composition rather than on the document layout.

1   Introduction

Writing documents in LaTeX may be a laborious task when the authors have to prepare their manuscripts rigorously respecting formatting rules imposed by publishers. Regardless of difficulty, a lot of thesis presented to the Coordination of Graduate Studies and Research in Engineering of the Federal University of Rio de Janeiro (COPPE/UFRJ) is typeseted in LaTeX. This demand motivated the creation of the CoppeTeX project, which tries to facilitate and encourage the use of LaTeX within the COPPE/UFRJ scope.

The `coppe` document class is the main product of CoppeTeX. It was designed to be clear and succinct. It enables the creation of dissertations, qualifying exams and thesis in a simple and automatic way. The main goal of the `coppe` class is to maintain authors strictly focused on text composition without worrying about margins sizes, line spacing, paper size, vertical and horizontal alignment, etc. The CoppeTeX project comprehends also BibTeX and MakeIndex style files for creating lists of references, symbols and abbreviations. Although there aren't official guidelines to write qualifying exams, we provide this option just for convenience, as this exam is a requisite to obtain the DSc degree and, for some of the programs, the MSc degree.

In which follows, it is described the user interface of the `coppe` class. Some details about using the style files cited above are also given. We use the term *thesis* to generally refer to dissertation, qualifying exam, and thesis itself.

2   License

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copying, distributing or modifying the source code, among other acts covered by this license.

To see the full text of the GNU GPL license, go to the `COPYING` file attached to this package.

3 Support

We maintain a mailing list where users can send questions, comments, and bugs to. More details can be found here.

However, as the project maintenance was transferred to a new repository, bug reports, as well as new feature requests, should be directed to https://github.com/COPPE-UFRJ/CoppeTeX.

4 User interface

\frontmatter A thesis to be approved by the Academic Registry at COPPE/UFRJ must contain
\mainmatter three-parts: *front*, *main* and *back* matters [1]. Each one of these parts is started
\backmatter by calling its corresponding macro \frontmatter, \mainmatter or \backmatter. The front matter of a thesis consists of front cover and face, cataloging page, dedication, acknowledgments, abstracts, table of contents, and lists of tables, algorithms, symbols and abbreviations. The main matter is just composed by chapters, while the back matter usually consists of bibliographic references, appendices and index.

You must invoke the \frontmatter macro immediately after the \maketitle one. The \mainmatter command comes right before the first chapter, and \backmatter must be typed before the list of references.

Front cover

This element was recently introduced by the Academic Registry. It is automatically constructed by the \maketitle command.

Front face

The front face is unnumbered. There, it is not allowed to use hyphenation [1]. It is constructed by calling \maketitle. Next, it is described the commands used to enter the information required to create it.

\author   The \author command was redefined. Here, it takes two arguments: the author's first names and surname, e.g., \author{First Names}{Surname}. The words should be typed with only first letters in uppercase.

\title   The macros \title and \foreigntitle are used to enter the titles of your
\foreigntitle monograph in the current and foreign languages. The default languages are Brazilian Portuguese and English. The babel package is automatically loaded by coppe.cls, so you do not need to load it again. The Brazilian Portuguese is the main language and the English is only required for the foreign abstract.

\advisor   Every COPPE student is coordinated by at least one advisor. M.Sc. and D.Sc.
\examiner students can have at most 2 and 3 advisors, respectively. Their names must be provided by issuing the command \advisor as below:

    \advisor{Title}{Advisor's Name}{Surname}{Degree}

```
\advisor{Title}{Second Advisor's Name}{Surname}{Degree}
\advisor{Title}{Third Advisor's Name}{Surname}{Degree}
```

The advisors are not necessarily members of the thesis examination board. Thus, it is required to enter the names of all examiners using the \examiner macro. The examiners' names are entered differently:

```
\examiner{Title}{First Examiner's Name Surname}{Degree}
\examiner{Title}{Second Examiner's Name Surname}{Degree}
...
\examiner{Title}{N-th Examiner's Name Surname}{Degree}
```

Remember that all names must be given before calling \maketitle.

\department   The Alberto Luiz Coimbra institute is divided into 12 academic units: Biomedical Engineering (PEB), Civil Engineering (PEC), Electrical Engineering (PEE), Mechanical Engineering (PEM), Metallurgical and Materials Science Engineering (PEMM), Nuclear Engineering (PEN), Ocean Engineering (PENO), Energy Planning (PPE), Production Engineering (PEP), Chemical Engineering (PEQ), Systems Engineering and Computer Science (PESC), and Transportation Engineering (PET). You must specify your department using one of the above abbreviations, e.g., \department{PEC}.

\date   This macro is used to set the month and year of defense. This information is required to create the front face, cataloging details page and abstracts. For example, October 2007 should be entered as \date{10}{2007}.

\keyword   The keywords should describe the concentration areas of your work. You must provide them as follows:

```
\keyword{First Keyword}
\keyword{Second Keyword}
...
\keyword{N-th Keyword}
```

Usually, six words are enough.

Cataloging details

This page contains cataloging information useful for librarians. Fortunately, it is automatically generated from the data you entered at the time you call \maketitle. It is not needed in qualifying exams, though.

Dedication (optional)

\dedication This macro was added for convenience. The input text is placed at the right bottom of a blank page. It is emphasized and in normal size.

Abstracts

abstract (*env.*) As stated by the Academic Registry [1], abstracts must be in one page each, with
foreignabstract (*env.*) at most 250 words. We recommended that they should be only one paragraph long. They must be defined inside the environments abstract and foreignabstract.

Lists of symbols and abbreviations (optional)

`\abbrev` The lists of symbols and abbreviations are optional, although highly recommended.
`\symbl` It is a good practice to define a symbol/abbreviation in its first occurrence in the text. To define a symbol use `\symbl[alphabetic symbol]{Symbol}{Symbol Definition}`, and for abbreviations `\abbrev[alphabetic symbol]{Abbreviation}{Abbreviation Definition}`. These commands are called *dummy*, since they don't output anything at the place they are executed, just an entry in the correspondent list.

`\makeloabbreviations` These lists are lexicographically sorted by using the MakeIndex program, which
`\makelosymbols` is part of any LATEX implementation. For `\symbl`, if the optional parameter is
`\printloabbreviations` provided, it will used as sort key. This was later, in 2024, implemented also for
`\printlosymbols` `\abbrev`, otherwise `Symbol`, or `Abreviation` will be used as sort key, what can result in an undesirable order if it contains LATEXcommands, mathematical symbols, or mix of uppercase and lowercase. MakeIndex needs two commands to create a final sorted list: one which generates a list of entries and the other that indicates the position where the list will be printed out. To generate the lists of symbols and abbreviations, the `coppe` class provides the commands `\makeloabbreviations` and `\makelosymbols`, respectively. They must be called in the document preamble. The commands `\printlosymbols` and `\printloabbreviations` have to be invoked at the point where you want these lists appear, e.g., following the list of tables as showed in the example. Once you call `latex`, it will be created two files with extensions `abx` and `syx`, which contain MakeIndex input data. They must be processed with `makeindex` in order to get the lists correctly produced, redirecting the output to files with extension `lab` and `los` respectively:

```
makeindex -s coppe.ist -o example.lab example.abx
makeindex -s coppe.ist -o example.los example.syx
```

Note the `-s` option for specifying the style `coppe.ist`. Now, rerun `latex` twice to get the references solved and you are done.

References

It is well known that bibliography databases can be easily maintained with the aid of BIBTEX. Thus, the COPPETEX project designed two BIBTEX styles, `coppe-plain.bst` and `coppe-unsrt.bst`. The `coppe-plain.bst` creates a list of references alphabetically sorted. The later is a numbered style, which sorts references by the order of citation. To use them, you have to select either `coppe-plain` or `coppe-unsrt` as the BIBTEX style and include your BIBTEX references without the `bib` extension, as in the following example:

```
\bibliographystyle{coppe-unsrt}
\bibliography{example}
```

As of May 4th, 2023, there are new bibliograhic styles for english, `en-coppe-plain.bst` and `en-coppe-plain.bst`, that uses other string constants, such as "Technical Report" instead of "Relatório Técnico".

Run in sequence LATEX, BIBTEX, and twice again LATEX to resolve reference. These styles are `natbib` compatible. This means that you can freely issue the commands `\citet` and `\citep`, as well as any other `natbib` feature.

Appendix and Annex (Optional)

\appendix Appendices and annexes are optional chapters that are part of the back matter.
\annex The \appendix command is a standard LATEX command used before all appendices. CoppeTEX introduces the \annex command, which should be used only in the back matter (i.e., after the \backmatter command) and only after all existing \appendix chapters. This restriction is due to implementation constraints.

Therefore, the order for backmatter is:

```
\backmatter
\bibliographystyle{coppe-plain}
\bibliography{main}
\appendix
\chapter{An Appendix}
\chapter{Another Appendix}
\annex
\chapter{First Annex}
\chapter{Second Annex}
```

Annex was introduced in v3.5

5 Class options

There are some options users can specify in order to customize the appearance of the output produced by the coppe class. These options can be passed to coppe as follows: \documentclass[option1, option2]{coppe}. In which follows, we give a brief description of all supported options.

dsc, msc, dscexam, mscexam The coppe class is able to produce thesis, dissertations, and qualifying exams, which are enabled by the dsc, msc, mscexam, and dscexam options, respectively.

doublespacing The default line spacing is one-and-a-half. For enabling double spacing between lines, use the doublespacing option.

numbers The default citation style is the author-year scheme, which must be followed by the use of its corresponding BIBTEX style, namely, the coppe-plain.bst file. For numbered citations, specify the option numbers to the coppe class. In this case, it is mandatory the use of coppe-unsrt.bst, as the bibliography style.

english CoppeTEX uses Babel. The default language is Portuguese (actually brazilian), with English being the second language. If option english is used, English becomes the main language and Portuguese the secondary. Look at the Babel package to switch between languages.

5.1 Changing document identification

\freeconfig The user could *optionally* use the command freeconfig to modify the parameters that print the document identification. The command freeconfig needs all

those paramerters, which are degree initials, degree name, title, foreign title, local doctype, and foreign doctype as in the following example:

```
\freeconfig{Dr.}{Philosophiae Doctor}{PhD}{Doutor}{Dissertation}{Tese}
```

6 Quick, useful tips

Pictures. The default picture format of LaTeX is the Encapsulated PostScript (EPS). If you use pdfLaTeX, the default format becomes the PDF, but you can equally load PNG files. For such, you must enter the name of your image file without extension, e.g., `\includegraphics{filename}`, and `pdflatex` will firstly look for a file called `filename.pdf` and after for file `filename.png`. For producing high quality pictures with embedded fonts we recommend the Ipe drawing software available here.

Fonts. The default font in LaTeX is the Computer Modern. If you would like to try its enhanced version, consider using the `lmodern` package. To use Times, it is recommended to load the package `mathptmx`, rather than the deprecated `times`. There is also an enhanced Times version available with the `tgtermes` package. You can still use the Arial font face with the package `uarial`.

Hyperref. When working with PDF's, there is the possibility to add extra information to the file as the author's name, document title, subject, keywords, etc. This is easily done with the `hyperref` package. It is also useful to enable hyperlinks. Fortunately, the `coppe` class will do this automatically if `hyperref` is loaded.

Printing. To get your work correctly printed, you must ensure that any page scaling option (e.g., fit or shrink to printable area) isn't enabled. This kind of option often comes in print dialogs of document visualization softwares.

longquote **Quotation** To quote text larger than three lines, according to ABNT, you must increase the left margin to 4 cm, do not use quotation marks, and use a smaller font. The `coppe` class provides the `longquote` environment to easily make these adjustments.

7 A simple example

```
1 ⟨∗example⟩
2 \documentclass[dsc]{coppe}
3
4 \usepackage{booktabs}% tabelas mais bonitas
5 \usepackage{rotating}% rodando coisas, como tabelas
6 \usepackage{longtable} % tabelas longas
7 \usepackage[most]{tcolorbox} % caixas de texto
8 \usepackage{amsmath,amssymb}
9 \usepackage{hyperref}
10 \usepackage{listings} % para usar listagens
```

```latex
11
12
13 \makelosymbols
14 \makeloabbreviations
15
16 \begin{document}
17   \title{Título da Tese}
18   \foreigntitle{Thesis Title}
19   \author{Nome do Autor}{Sobrenome}
20   \advisor{Prof.}{Nome do Primeiro Orientador}{Sobrenome}{D.Sc.}
21   \advisor{Prof.}{Nome do Segundo Orientador}{Sobrenome}{Ph.D.}
22   \advisor{Prof.}{Nome do Terceiro Orientador}{Sobrenome}{D.Sc.}
23
24   \examiner{Prof.}{Nome do Primeiro Examinador Sobrenome}{D.Sc.}
25   \examiner{Prof.}{Nome do Segundo Examinador Sobrenome}{Ph.D.}
26   \examiner{Prof.}{Nome do Terceiro Examinador Sobrenome}{D.Sc.}
27   \examiner{Prof.}{Nome do Quarto Examinador Sobrenome}{Ph.D.}
28   \examiner{Prof.}{Nome do Quinto Examinador Sobrenome}{Ph.D.}
29   \department{PESC}
30   \date{01}{2024}
31
32   \keyword{Primeira palavra-chave}
33   \keyword{Segunda palavra-chave}
34   \keyword{Terceira palavra-chave}
35
36   \maketitle
37
38   \frontmatter
39   \dedication{A alguém cujo valor é digno desta dedicatória.}
40
41   \chapter*{Agradecimentos}
42
43   Gostaria de agradecer a todos.
44
45   \begin{abstract}
46
47   Apresenta-se, nesta tese, ...
48
49   \end{abstract}
50
51   \begin{foreignabstract}
52
53   In this work, we present ...
54
55   \end{foreignabstract}
56
57   \tableofcontents
58   \listoffigures
59   \listoftables
60   \printlosymbols
61   \printloabbreviations
62
63   \mainmatter
64   \chapter{Introdução}
```

```
65
66    Este é um documento exemplo para o uso da classe CoppeTeX, destinado a ajudar os alunos da
67
68    A classe \verb|coppe| foi criada por Vicente Helano e George Ainsworth, porém, em 2024, é
69
70    A versão mais atual dessa classe é mantida no GitHub, no repositório \url{https://github.c
71
72    Esse documento segue a norma de formatação de teses e dissertações da COPPE. Ele também po
73
74    Esse documento é usado como exemplo de coisas que podem ser feitas. Ele está configurado p
75
76    É importante de notar que essa classe não foi construída sobre a classe \LaTeX \  para a A
77
78    Apesar desse modelo ser muito bom, ele tem um defeito: a limitação do sistema de referênci
79
80    Mais ainda, as regras da COPPE ainda não se adaptaram, no início de 2024, as novas regras
81
82    Este documento não substitui, mas complementa, o documento que descreve a classe.
83
84
85
86  \chapter{Configurações Iniciais}
87
88    A primeira coisa a fazer é escolher o tipo de documento. Isso é feito como uma opção no c
89
90    Como pode ser visto nesse documento, muita coisa pode ser configurada, o que gerará o tra
91
92    Recomendo ler o documento ''The \verb*|coppe| document class'' para entender melhor todas
93
94  \section{Linguagem principal do texto}
95
96    Essa classe considera que o texto principal está em português e algumas partes específicas
97  \begin{itemize}
98  \item A opção \verb|english| deve ser usada no comando \verb|\documentclass|.
99  \item Os estilos de bibliografia usados devem ser \verb|en-coppe-plain.bst| ou \verb|en-cop
100 \end{itemize}
101
102   A variação de linguagem, em inglês ou português apenas, já é suportada pela classe Coppe\T
103
104
105 \section{Por que usar o \LaTeX}
106
107   Há uma grande discussão entre usuário de Word e \LaTeX, principalmente, quanto ao uso dess
108
109   Nós escolhemos o \LaTeX por alguns motivos: grande facilidade de seguir um estilo sem se p
110
111   As principais desvantagens são: idiossincrasias que podem gastar tempo, pouco controle sob
112
113 \section{Como e onde usar o \LaTeX}
114
115   Existem muitos tutoriais de \LaTeX, mas basicamente, em 2024, ele é usado em dois ambiente
116   \begin{enumerate}
117   \item Na sua máquina, instalando uma versão completa como o Mik\TeX, típico do Windows, ou
118   \item Usar um ambiente na rede, como o Overleaf.
```

```
119    \end{enumerate}
120
121    Em todo caso, recomendo fortemente que, ao mesmo tempo, mantenha versões no Git e faça o b
122
123
124 \chapter{Algumas Regras da COPPE}
125
126    Todas abreviaturas e símbolos devem ser definida antes de utilizada. Isso é facilmente fei
127
128    É imprescindível definir os símbolos, tal como o
129    conjunto dos números reais $\mathbb{R}$ e o conjunto vazio $\emptyset$.
130    \symbl{$\mathbb{R}$}{Conjunto dos números reais}
131    \symbl{$\emptyset$}{Conjunto vazio}. Usamos esse exemplo aqui justamente para mostrar como
132
133    Para as listas de abreviaturas e símbolos funcionarem no Overleaf é necessário rodar o \ve
134
135    Como as listas de símbolos e de abreviaturas usamo o mesmo comando usado para criar índice
136
137 \section{Citações}
138
139  Citações curtas podem ser feitas \quote{o comando quote} ou direto com ``duas crases e dois
140
141    \begin{longquote}
142    Um exemplo de citação longa nas regras da ABNT (4cm de recuo e fonte menor)
143    feita com o ambiente  \verb=longquote= The primary objective of this
144    investigation was to determine the feasibility of detecting corrosion in
145    aluminum Naval aircraft components with neutron radiographic interrogation
146    and the use of standard corrosion penetrameters. Secondary objectives
147    included the determination of the effect of object thickness on image quality,
148    the defining of minimum levels of detectability and a preliminary investigation
149    of a means whereby the degree of corrosion could be quantified with neutron
150    radiographic data. \cite{article-example}
151    \end{longquote}
152
153    Citações devem apontar as referências. Para isso, está disponível o ótimo pacote \verb*|na
154
155    Em todo caso, \textbf{deve se tomar enorme atenção com as citações, para evitar ocorrer em
156
157 \chapter{Floats}
158
159 Grande parte dos problemas de iniciantes, e veteranos, em \LaTeX é da localização dos \texti
160
161 A regra geral de posicionamento é que uma figura ou quadro só pode aparecer a partir da mesm
162
163 \textbf{Segundo a norma da ABNT, as legendas} \verb|\caption| \textbf{das figuras e quadros
164
165 Quadros são opcionais. Quando usados, tabelas passam a só conter números, enquanto quadros c
166
167
168 \section{Tabelas e Figuras Padrão}
169
170 Vamos ver uma tabela padrão, como a \autoref{tab:exemplo_numeros}.
171
172 \begin{table}[ht]
```

```latex
173 \centering % Centraliza a tabela
174 \caption{Exemplo de Tabela de Números}
175 \label{tab:exemplo_numeros}
176 \begin{tabular}{ccc} % Define a quantidade de colunas
177 \hline % Linha superior
178 \textbf{Coluna 1} & \textbf{Coluna 2} & \textbf{Coluna 3} \\ % Cabeçalhos
179 \hline % Linha média
180 1 & 2 & 3 \\ % Primeira linha de dados
181 \hline
182 4 & 5 & 6 \\ % Segunda linha de dados
183 \hline
184 7 & 8 & 9 \\ % Terceira linha de dados
185 \hline
186 10 & 11 & 12 \\ % Quarta linha de dados
187 \hline % Linha inferior
188 \end{tabular}
189 \end{table}
190
191
192
193 Já a \autoref{fig:exemplo_figura} é uma figura padrão, com controle da largura.
194
195 \begin{figure}[ht]
196 \centering % Centraliza a figura
197 \includegraphics[width=0.5\textwidth]{coppe-logo.pdf} % Inclui a imagem com metade da largur
198 \caption{Exemplo de Figura com Legenda Abaixo} % Legenda da figura
199 \label{fig:exemplo_figura} % Etiqueta para referência cruzada
200 \end{figure}
201
202
203
204
205
206 \section{Tabelas mais elegantes}
207
208 Atualmente a tendência é usar tabelas mais leves, como \autoref{tab:exemplo_numerosbom}. Iss
209
210 \begin{table}[ht]
211 \centering % Centraliza a tabela
212 \caption{Exemplo de Tabela de Números mais elegantes}
213 \label{tab:exemplo_numerosbom}
214 \begin{tabular}{ccc} % Define a quantidade de colunas
215 \toprule % Linha superior
216 \textbf{Coluna 1} & \textbf{Coluna 2} & \textbf{Coluna 3} \\ % Cabeçalhos
217 \midrule % Linha média
218 1 & 2 & 3 \\ % Primeira linha de dados
219 4 & 5 & 6 \\ % Segunda linha de dados
220 7 & 8 & 9 \\ % Terceira linha de dados
221 10 & 11 & 12 \\ % Quarta linha de dados
222 \bottomrule % Linha inferior
223 \end{tabular}
224 \end{table}
225
226 \section{Tabelas Longas ou Largas}
```

```latex
227
228 Se sua tabela é muito longa ou larga, existem várias opções.
229 \begin{itemize}
230     \item alterar o tamanho da letra
231     \item Usar o longtable
232     \item rodar a tabela, fazendo ela em \textit{landscape}
233     \item fazer a tabela dentro de um minibox
234 \end{itemize}
235
236
237 \subsection{Tabelas largas demais}
238
239 É comum em teses que as tabelas sejam largas demais. Há várias formas de resolver isso.
240
241 A \autoref{tab:tabela_largafns} é larga demais, e nela isso é resolvido diminuindo a fonte p
242
243 \begin{table}[ht]
244 \centering % Centraliza a tabela
245 \caption{Exemplo de Tabela Larga com Fonte Menor}
246 \label{tab:tabela_largafns}
247 \footnotesize % Aplica uma fonte menor para a tabela
248 \begin{tabular}{cccccccc} % Aumente o número de colunas conforme necessário
249 \toprule
250 \textbf{Coluna 1} & \textbf{Coluna 2} & \textbf{Coluna 3} & \textbf{Coluna 4} & \textbf{Colu
251 \midrule
252 Dado 1.1 & Dado 1.2 & Dado 1.3 & Dado 1.4 & Dado 1.5 & Dado 1.6 & Dado 1.7 & Dado 1.8 \\
253 Dado 2.1 & Dado 2.2 & Dado 2.3 & Dado 2.4 & Dado 2.5 & Dado 2.6 & Dado 2.7 & Dado 2.8 \\
254 Dado 3.1 & Dado 3.2 & Dado 3.3 & Dado 3.4 & Dado 3.5 & Dado 3.6 & Dado 3.7 & Dado 3.8 \\
255 \bottomrule
256 \end{tabular}
257 \end{table}
258
259 O comando \verb|\resizebox{width}{height}{content}| permite ajustar o tamanho de qualquer co
260
261 \begin{table}[ht]
262 \centering
263 \caption{Exemplo de Tabela Redimensionada}
264 \label{tab:examplerb}
265 \resizebox{\textwidth}{!}{%
266 \begin{tabular}{llll}
267 \toprule
268 Coluna 1 & Coluna 2 & Coluna 3 & Coluna 4 \\
269 \midrule
270 Dados 1 & Dados 2 & Dados 3 & Dados 4 \\
271 Dados 5 & Dados 6 & Dados 7 & Dados 8 \\
272 \bottomrule
273 \end{tabular}%
274 }
275 \end{table}
276
277
278 Para rodar uma tabela muito larga em 90 graus no LaTeX, você pode usar o pacote \verb*|rotat
279
280 Aqui está um exemplo de como usar o ambiente \verb*|sidewaystable| para girar uma tabela. Pr
```

```
281
282 \begin{sidewaystable}
283 \centering
284 \caption{Sua Legenda Aqui}
285 \label{tab:sua_tabela}
286 \begin{tabular}{lll}
287 \toprule
288 Coluna 1 & Coluna 2 & Coluna 3 \\
289 \midrule
290 Item 1 & Item 2 & Item 3 \\
291 Item 4 & Item 5 & Item 6 \\
292 \bottomrule
293 \end{tabular}
294 \end{sidewaystable}
295
296 Se a tabela for muito longa, o ambiente \verb|longtable| é o ideal. Ele fornece comandos par
297
298 % Exemplo de tabela longa que se estende por várias páginas
299 \begin{longtable}{|c|c|c|}
300 % primeiro cabeçalho (é o caption)
301 \caption{Exemplo de Tabela Longa}\label{tab:longa} \\
302 \hline \textbf{Coluna 1} & \textbf{Coluna 2} & \textbf{Coluna 3} \\ \hline
303 \endfirsthead
304 % cabeçalho normal
305 \multicolumn{3}{c}%
306 {{\tablename\ \thetable{} -- continuação da página anterior}} \\
307 \hline \textbf{Coluna 1} & \textbf{Coluna 2} & \textbf{Coluna 3} \\ \hline
308 \endhead
309 % pé normal
310 \hline \multicolumn{3}{|r|}{{Continua na próxima página}} \\ \hline
311 \endfoot
312 \hline
313 % último pé
314 \multicolumn{3}{|r|}{{Continua na próxima página}}\\
315 \hline \hline
316 \endlastfoot
317
318 % Conteúdo da tabela
319 1 & 2 & 3 \\
320 4 & 5 & 6 \\
321 1 & 2 & 3 \\
322 4 & 5 & 6 \\
323 1 & 2 & 3 \\
324 4 & 5 & 6 \\
325 1 & 2 & 3 \\
326 4 & 5 & 6 \\
327 1 & 2 & 3 \\
328 4 & 5 & 6 \\
329 1 & 2 & 3 \\
330 4 & 5 & 6 \\
331 1 & 2 & 3 \\
332 4 & 5 & 6 \\
333 1 & 2 & 3 \\
334 4 & 5 & 6 \\
```

```
335 1 & 2 & 3 \\
336 1 & 2 & 3 \\
337 4 & 5 & 6 \\
338 1 & 2 & 3 \\
339 4 & 5 & 6 \\
340 1 & 2 & 3 \\
341 4 & 5 & 6 \\
342 1 & 2 & 3 \\
343 4 & 5 & 6 \\
344 1 & 2 & 3 \\
345 4 & 5 & 6 \\
346 1 & 2 & 3 \\
347 4 & 5 & 6 \\
348 1 & 2 & 3 \\
349 4 & 5 & 6 \\
350 1 & 2 & 3 \\
351 4 & 5 & 6 \\
352 1 & 2 & 3 \\
353 4 & 5 & 6 \\
354 1 & 2 & 3 \\
355 4 & 5 & 6 \\
356 1 & 2 & 3 \\
357 4 & 5 & 6 \\
358 1 & 2 & 3 \\
359 4 & 5 & 6 \\1 & 2 & 3 \\
360 4 & 5 & 6 \\
361 1 & 2 & 3 \\
362 4 & 5 & 6 \\
363 1 & 2 & 3 \\
364 1 & 2 & 3 \\
365 4 & 5 & 6 \\
366 1 & 2 & 3 \\
367 4 & 5 & 6 \\
368 1 & 2 & 3 \\
369 4 & 5 & 6 \\
370 1 & 2 & 3 \\
371 4 & 5 & 6 \\
372 1 & 2 & 3 \\
373 4 & 5 & 6 \\
374 1 & 2 & 3 \\
375 4 & 5 & 6 \\
376 1 & 2 & 3 \\
377 4 & 5 & 6 \\
378 1 & 2 & 3 \\
379 4 & 5 & 6 \\
380 1 & 2 & 3 \\
381 4 & 5 & 6 \\
382 1 & 2 & 3 \\
383 4 & 5 & 6 \\
384 1 & 2 & 3 \\
385 4 & 5 & 6 \\
386 1 & 2 & 3 \\
387 4 & 5 & 6 \\
388 1 & 2 & 3 \\
```

```
389 4 & 5 & 6 \\
390 1 & 2 & 3 \\
391 4 & 5 & 6 \\
392 1 & 2 & 3 \\
393 4 & 5 & 6 \\
394 1 & 2 & 3 \\
395 4 & 5 & 6 \\
396 1 & 2 & 3 \\
397 4 & 5 & 6 \\
398 1 & 2 & 3 \\
399 4 & 5 & 6 \\
400 1 & 2 & 3 \\
401 4 & 5 & 6 \\
402 1 & 2 & 3 \\
403 4 & 5 & 6 \\
404 1 & 2 & 3 \\
405 4 & 5 & 6 \\
406 1 & 2 & 3 \\
407 4 & 5 & 6 \\
408 1 & 2 & 3 \\
409 4 & 5 & 6 \\
410 1 & 2 & 3 \\
411 4 & 5 & 6 \\
412 1 & 2 & 3 \\
413 4 & 5 & 6 \\
414 1 & 2 & 3 \\
415 4 & 5 & 6 \\
416 1 & 2 & 3 \\
417 4 & 5 & 6 \\
418 1 & 2 & 3 \\
419 4 & 5 & 6 \\
420 1 & 2 & 3 \\
421 4 & 5 & 6 \\
422 1 & 2 & 3 \\
423 4 & 5 & 6 \\
424 1 & 2 & 3 \\
425 4 & 5 & 6 \\
426
427 % Repetir linhas semelhantes conforme necessário para estender a tabela por 3 páginas
428 \end{longtable}
429
430    \chapter{Revis\~ao Bibliogr\'afica}
431
432    Para ilustrar a completa ades\~ao ao estilo de cita{\c c}\~oes e listagem de
433    refer\^encias bibliogr\'aficas, a Tabela~\ref{tab:citation} apresenta cita{\c
434    c}\~oes de alguns dos trabalhos contidos na norma fornecida pela CPGP da
435    COPPE, utilizando o estilo numérico. Tirando do comando inicial o parâmetro opcional numér
436
437    \begin{table}[h]
438    \caption{Exemplos de cita{\c c}\~oes utilizando o comando padr\~ao
439      \texttt{\textbackslash cite} do \LaTeX\ e
440      o comando \texttt{\textbackslash citet},
441      fornecido pelo pacote \texttt{natbib}.}
442    \label{tab:citation}
```

```latex
443    \centering
444    {\footnotesize
445    \begin{tabular}{|c|c|c|}
446      \hline
447      Tipo da Publicação & \verb|\cite| & \verb|\citet|\\
448      \hline
449      Livro & \cite{book-example} & \citet{book-example}\\
450      Artigo & \cite{article-example} & \citet{article-example}\\
451      Relatório & \cite{techreport-example} & \citet{techreport-example}\\
452      Relatório & \cite{techreport-exampleIn} & \citet{techreport-exampleIn}\\
453      Anais de Congresso & \cite{inproceedings-example} &
454        \citet{inproceedings-example}\\
455      Séries & \cite{incollection-example} & \citet{incollection-example}\\
456      Em Livro & \cite{inbook-example} & \citet{inbook-example}\\
457      Dissertação de mestrado & \cite{mastersthesis-example} &
458        \citet{mastersthesis-example}\\
459      Tese de doutorado & \cite{phdthesis-example} & \citet{phdthesis-example}\\
460      \hline
461    \end{tabular}}
462    \end{table}
463
464  \begin{table}[h]
465  \caption{Exemplos de cita{\c c}\~oes utilizando o comando padr\~ao
466    \texttt{\textbackslash cite} do \LaTeX\ e
467    o comando \texttt{\textbackslash citet},
468    fornecido pelo pacote \texttt{natbib}. Além disso, usando o booktabs.}
469  \label{tab:citation1}
470  \centering
471  {\footnotesize
472  \begin{tabular}{ccc}
473    \toprule
474    Tipo da Publicação & \verb|\cite| & \verb|\citet|\\
475    \midrule
476    Livro & \cite{book-example} & \citet{book-example}\\
477    Artigo & \cite{article-example} & \citet{article-example}\\
478    Relatório & \cite{techreport-example} & \citet{techreport-example}\\
479    Relatório & \cite{techreport-exampleIn} & \citet{techreport-exampleIn}\\
480    Anais de Congresso & \cite{inproceedings-example} &
481      \citet{inproceedings-example}\\
482    Séries & \cite{incollection-example} & \citet{incollection-example}\\
483    Em Livro & \cite{inbook-example} & \citet{inbook-example}\\
484    Dissertação de mestrado & \cite{mastersthesis-example} &
485      \citet{mastersthesis-example}\\
486    Tese de doutorado & \cite{phdthesis-example} & \citet{phdthesis-example}\\
487    \bottomrule
488  \end{tabular}}
489  \end{table}
490
491 \chapter{Alguns outros exemplo úteis}
492
493 \begin{tcolorbox}[title=Meu Textbox]
494 Este é o conteúdo do meu textbox. Você pode adicionar qualquer texto aqui, bem como incluir
495 \end{tcolorbox}
496
```

```latex
497 \begin{tcolorbox}
498 Este é o conteúdo do meu textbox sem título. Você pode adicionar qualquer texto aqui, bem co
499 \end{tcolorbox}
500
501 \begin{figure}[ht]
502     \centering
503     \begin{tikzpicture}
504         \node[anchor=south west,inner sep=0] (image) at (0,0) {\includegraphics[width=0.5\te
505         \begin{scope}[x={(image.south east)},y={(image.north west)}]
506             % Definindo o textbox dentro da figura
507             \node[anchor=north west, text width=0.3\textwidth, fill=white, opacity=0.7, text
508                 \begin{tcolorbox}[colback=red!5!white,colframe=red!75!black,title=Textbox de
509                     Este textbox fala sobre como inserir um textbox dentro de uma figura usa
510                 \end{tcolorbox}
511             };
512         \end{scope}
513     \end{tikzpicture}
514     \caption{Figura com Textbox}
515     \label{fig:figura_com_textbox1}
516 \end{figure}
517
518
519 \begin{figure}[ht]
520     \centering
521  \begin{tcolorbox}
522 Este é o conteúdo do meu textbox sem título. Você pode adicionar qualquer texto aqui, bem co
523 \end{tcolorbox}
524     \caption{Figura com Textbox simples}
525     \label{fig:figura_com_textbox}
526 \end{figure}
527
528     \chapter{Método Proposto}
529     \chapter{Resultados e Discuss\~oes}
530
531     \section{Algumas Demonstra{\c c}\~oes}
532
533     A  Lista de Símbolos precisa usar comandos específicos. Aqui vamos usar os símbolos $\alph
534     \symbl[beta]{Beta}{A palavra Beta more e corrigida}
535     \symbl[zzbeta]{$\beta$}{A letra $\beta$ corrigida}
536     \symbl{beta}{A palavra beta}
537     \symbl{alpha}{A palavra alpha}
538     \symbl[alpha]{Alpha}{A palavra Alpha}
539     \symbl[zzalpha]{$\alpha$}{A letra $\alpha$ corrigida}
540     \symbl[marco]{Marco}{A palavra Marco corrigida}
541
542     A Lista de Abreviações segue, a partir de 2024, a mesma regra, e aqui seguem alguns exempl
543     \abbrev{GoT}{Game of Thrones}
544     \abbrev[GOT]{GoT}{Game of Thrones ordenado como GOT}
545     \abbrev[iot]{IoT}{IoT ordenado como iot}
546     \abbrev[IoT]{IoT}{IoT ordenado como IoT}
547     \abbrev[IOT]{IoT}{IoT ordenado como IOT}
548     \abbrev{IoT}{IoT com ordenação default}
549     \abbrev[ITU]{ITU}{ITU mesmo}
550
```

```
551
552
553
554   \chapter{Conclusões}
555
556   \backmatter
557
558   \bibliographystyle{coppe-unsrt}
559   \bibliography{example}
560
561
562
563 \appendix
564
565 \chapter{Um apêndice}
566
567 Segundo a norma da ABNT (Associação Brasileira de Normas Técnicas), a definição e utilização
568
569 Apêndice: O apêndice é um texto ou documento elaborado pelo autor do trabalho com o objetivo
570
571
572 \chapter{Outro apêndice}
573
574 \annex
575
576
577 \chapter{Um Anexo}
578 Segundo a norma da ABNT (Associação Brasileira de Normas Técnicas), a definição e utilização
579
580
581
582 Anexo: O anexo, por sua vez, consiste em um texto ou documento não elaborado pelo autor, que
583
584 No modelo \CoppeTeX os anexos devem obrigtoriamente vir depois dos apêndices e usam o comand
585
586
587 \chapter{Outro Anexo}
588
589
590 \end{document}
591
592 ⟨/example⟩
```

8 Implementation

8.1 The 'coppe.cls' file

```
593 ⟨∗class⟩
594 \def\filename{coppe.dtx}
595 \def\fileversion{v3.4}
596 \def\filedate{2024/01/24}
597 \NeedsTeXFormat{LaTeX2e}[1995/12/01]
598 \ProvidesClass{coppe}[\filedate\ \fileversion\ COPPE Dissertations and Thesis]
599 \LoadClass[12pt,a4paper,oneside]{book}
```

```latex
600 \RequirePackage[sort&compress]{natbib}
601 \RequirePackage{hyphenat}
602 \RequirePackage{lastpage}
603 \RequirePackage{ifthen}
604 \RequirePackage{graphicx}
605 \RequirePackage{setspace}
606 \RequirePackage{tabularx}
607 \RequirePackage{etoolbox}
608 \RequirePackage{eqparbox}
609 \RequirePackage{ltxcmds}
610 \RequirePackage[T1]{fontenc}
611 \RequirePackage[a4paper,bindingoffset=0.0cm,vcentering=true,%
612 top=2.5cm,bottom=2.5cm,left=3.0cm,right=3.0cm]{geometry}
613 \def\CoppeTeX{{\rm C\kern-.05em{\sc o\kern-.025em p\kern-.025em
614 p\kern-.025em e}}\kern-.08em
615 T\kern-.1667em\lower.5ex\hbox{E}\kern-.125emX\spacefactor1000}

616 \newboolean{maledoc}
617 \setboolean{maledoc}{false}
618 %
619 % Class options.
620 % If you are writing a text in English, you must turn ''English'' on.
621 % Otherwise, Portuguese is considered the main language.
622 \newif\if@english\@englishfalse
623 \DeclareOption{english}{\@englishtrue}
624 \DeclareOption{msc}{%
625   \newcommand{\@degree}{M.Sc.}
626   \newcommand{\@degreename}{Mestrado}
627   \newcommand{\local@degname}{Mestre}
628   \newcommand{\foreign@degname}{Master}
629   \newcommand\local@doctype{Disserta{\c c}{\~ a}o}
630   \newcommand\foreign@doctype{Dissertation}
631 }
632 \DeclareOption{dscexam}{%
633   \newcommand{\@degree}{D.Sc.}
634   \newcommand{\@degreename}{Doutorado}
635   \newcommand{\local@degname}{Doutor}
636   \newcommand{\foreign@degname}{Doctor}
637   \setboolean{maledoc}{true}
638   \newcommand\local@doctype{Exame de Qualifica{\c c}{\~ a}o}
639   \newcommand\foreign@doctype{Qualifying Exam}
640 }
641 \DeclareOption{mscexam}{%
642  \newcommand{\@degree}{M.Sc.}
643   \newcommand{\@degreename}{Mestrado}
644   \newcommand{\local@degname}{Mestre}
645   \newcommand{\foreign@degname}{Master}
646   \setboolean{maledoc}{true}
647   \newcommand\local@doctype{Exame de Qualifica{\c c}{\~ a}o}
648   \newcommand\foreign@doctype{Qualifying Exam}
649 }
650 \DeclareOption{dsc}{%
651   \newcommand{\@degree}{D.Sc.}
652   \newcommand{\@degreename}{Doutorado}
653   \newcommand{\local@degname}{Doutor}
```

```
654    \newcommand{\foreign@degname}{Doctor}
655    \newcommand\local@doctype{Tese}
656    \newcommand\foreign@doctype{Thesis}
657 }
658 \DeclareOption{numbers}{%
659    \PassOptionsToPackage{numbers}{natbib}
660 }
```

Here is the default one-and-a-half line spacing. Users can change to double spacing by passing the `doublespacing` option.

```
661 \onehalfspacing
662 \DeclareOption{doublespacing}{%
663    \doublespacing
664 }
665 \ProcessOptions\relax
666 \if@english
667    \RequirePackage[brazilian,english]{babel}
668 \else
669    \RequirePackage[english,brazilian]{babel}
670 \fi
671 \addto{\captionsenglish}{%
672    \renewcommand{\bibname}{References}
673 }
```

\department   This macro is used to set the author's affiliation. There are twelve options which correspond to all academic units at COPPE/UFRJ. It defines the current and the foreign names of these units.

```
674 \newcommand\department[1]{%
675    \ifthenelse{\equal{#1}{PEB}}
676      {\global\def\local@deptname{Engenharia Biom{\' e}dica}
677       \global\def\foreign@deptname{Biomedical Engineering}}{}
678    \ifthenelse{\equal{#1}{PEC}}
679      {\global\def\local@deptname{Engenharia Civil}
680       \global\def\foreign@deptname{Civil Engineering}}{}
681    \ifthenelse{\equal{#1}{PEE}}
682      {\global\def\local@deptname{Engenharia El{\' e}trica}
683       \global\def\foreign@deptname{Electrical Engineering}}{}
684    \ifthenelse{\equal{#1}{PEM}}
685      {\global\def\local@deptname{Engenharia Mec{\^ a}nica}
686       \global\def\foreign@deptname{Mechanical Engineering}}{}
687    \ifthenelse{\equal{#1}{PEMM}}
688      {\global\def\local@deptname{Engenharia Metal{\' u}rgica e de Materiais}
689 \global\def\foreign@deptname{Metallurgical and Materials Engineering}}{}
690    \ifthenelse{\equal{#1}{PEN}}
691      {\global\def\local@deptname{Engenharia Nuclear}
692       \global\def\foreign@deptname{Nuclear Engineering}}{}
693    \ifthenelse{\equal{#1}{PENO}}
694      {\global\def\local@deptname{Engenharia Oce{\^ a}nica}
695       \global\def\foreign@deptname{Ocean Engineering}}{}
696    \ifthenelse{\equal{#1}{PPE}}
697      {\global\def\local@deptname{Planejamento Energ{\' e}tico}
698       \global\def\foreign@deptname{Energy Planning}}{}
699    \ifthenelse{\equal{#1}{PEP}}
700      {\global\def\local@deptname{Engenharia de Produ{\c c}{\~ a}o}
```

```
701       \global\def\foreign@deptname{Production Engineering}}{}
702   \ifthenelse{\equal{#1}{PEQ}}
703     {\global\def\local@deptname{Engenharia Qu{\' i}mica}
704       \global\def\foreign@deptname{Chemical Engineering}}{}
705   \ifthenelse{\equal{#1}{PESC}}
706     {\global\def\local@deptname{Engenharia de Sistemas e Computa{\c c}{\~ a}o}
707       \global\def\foreign@deptname{Systems Engineering and Computer Science}}{}
708   \ifthenelse{\equal{#1}{PET}}
709     {\global\def\local@deptname{Engenharia de Transportes}
710       \global\def\foreign@deptname{Transportation Engineering}}{}
711   \ifthenelse{\equal{#1}{PENT}}
712     {\global\def\local@deptname{Engenharia de Nanotecnologia}
713       \global\def\foreign@deptname{Nanotechnology Engineering}}{}
714 }
```

\title Used to enter the title in Brazilian Portuguese.

```
715 \renewcommand\title[1]{%
716   \global\def\local@title{#1}%
717 }
```

\foreigntitle Used to enter the foreign title.

```
718 \newcommand\foreigntitle[1]{%
719   \global\def\foreign@title{#1}%
720 }
```

\advisor Defines globally the title, name and academic degree of the advisors.

```
721 \newcount\@advisor\@advisor0
722 \newcommand\advisor[4]{%
723   \global\@namedef{CoppeAdvisorTitle:\expandafter\the\@advisor}{#1}
724   \global\@namedef{CoppeAdvisorName:\expandafter\the\@advisor}{#2}
725   \global\@namedef{CoppeAdvisorSurname:\expandafter\the\@advisor}{#3}
726   \global\@namedef{CoppeAdvisorDegree:\expandafter\the\@advisor}{#4}
727   \global\advance\@advisor by 1
728   \ifnum\@advisor>1
729     \renewcommand\local@advisorstring{Orientadores}
730     \renewcommand\foreign@advisorstring{Advisors}
731   \fi
732 }
```

\examiner

```
733 \newcount\@examiner\@examiner0
734 \newcommand\examiner[3]{%
735   \global\@namedef{CoppeExaminer:\expandafter\the\@examiner}{#1\ #2}
736   \global\advance\@examiner by 1
737 }
```

\author It was redefined to allow the identification of the author's first names and surname.

```
738 \renewcommand\author[2]{%
739   \global\def\@authname{#1}
740   \global\def\@authsurn{#2}
741 }
```

`\date` This code makes easy to switch from dates in different languages.

```
742 \renewcommand\date[2]{%
743   \month=#1
744   \year=#2
745 }
```

`\local@monthname`

```
746 \newcommand\local@monthname{\ifcase\month\or
747   Janeiro\or Fevereiro\or Mar{\c c}o\or Abril\or Maio\or Junho\or
748   Julho\or Agosto\or Setembro\or Outubro\or Novembro\or Dezembro\fi}
```

`\foreign@monthname`

```
749 \newcommand\foreign@monthname{\ifcase\month\or
750   January\or February\or March\or April\or May\or June\or
751   July\or August\or September\or October\or November\or December\fi}
```

`\keyword`

```
752 \newcounter{keywords}
753 \newcommand\keyword[1]{%
754   \global\@namedef{CoppeKeyword:\expandafter\the\c@keywords}{#1}
755   \global\addtocounter{keywords}{1}
756 }
```

`\freeconfig` This command allows easy changing of core class parameters.

```
757 \newcommand\freeconfig[6]{%
758   \providecommand\@degree{}
759   \renewcommand\@degree{#1}
760   \providecommand\@degreename{}
761   \renewcommand\@degreename{#2}
762   \providecommand\local@degname{}
763   \renewcommand\local@degname{#3}
764   \providecommand\foreign@degname{}
765   \renewcommand\foreign@degname{#4}
766   \providecommand\local@doctype{}
767   \renewcommand\local@doctype{#5}
768   \providecommand\foreign@doctype{}
769   \renewcommand\foreign@doctype{#6}%
770 }
771 %    \end{macrocode}
772 % \end{macro}
773 %
774 % \begin{macro}{\frontmatter}
775 % The number of pages for both frontmatter and mainmatter printed
776 % in the cataloging details page is computed by means of simple
777 % \LaTeX\ labels.
778 %    \begin{macrocode}
779 \renewcommand\frontmatter{%
780   \cleardoublepage
781   \@mainmatterfalse
782   \pagenumbering{roman}
783   \thispagestyle{empty}
784   \setcounter{page}{2}
785   \makefrontpage
```

21

```
786    \clearpage
787    \pagestyle{plain}
788    \ifthenelse{\boolean{maledoc}}{}{\makecatalog}%
789 }
```

\mainmatter
```
790 \renewcommand\mainmatter{%
791    \coppe@mainBegin
792    \cleardoublepage
793    \@mainmattertrue
794    \pagestyle{plain}
795    \pagenumbering{arabic}}
```

\backmatter
```
796 \renewcommand\backmatter{%
797    \if@openright
798       \cleardoublepage
799    \else
800       \clearpage
801    \fi}
802 %
```

\maketitle
```
803 \renewcommand\maketitle{%
804    \pagenumbering{alph}
805    \ltx@ifpackageloaded{hyperref}{\coppe@hypersetup}{}%
806    \begin{titlepage}
807    \begin{flushleft}
808    \vspace*{1.5mm}
809    \setlength\baselineskip{0pt}
810    \setlength\parskip{1mm}
811    \makebox[20mm][c]{\hspace{4.8cm}\includegraphics{coppe-logo}}
812    \end{flushleft}
813    \vspace{1.05cm}
814    \begin{center}
815    \nohyphens{%
816       \if@english
817          \MakeUppercase\foreign@title
818       \else
819          \MakeUppercase\local@title
820       \fi}\par
821    \vspace*{3cm}
822    \nohyphens{\@authname\ \@authsurn}\par
823    \end{center}
824    \vspace*{2.1cm}
825    \begin{flushright}
826    \begin{minipage}{8.45cm}
827    \frontcover@maintext
828    \end{minipage}\par
829    \vspace*{7.5mm}
830    \nohyphens{%
831    \begin{tabularx}{8.45cm}[b]{@{}l@{ }>{\raggedright\arraybackslash}X@{}}
832       \local@advisorstring: &
833       \count1=0
```

22

```
834    \toks@={}
835    \@whilenum \count1<\@advisor \do{%
836    \ifcase\count1 % same as \ifnum0=\count1
837      \toks@=\expandafter{\csname CoppeAdvisorName:\the\count1%
838        \expandafter\endcsname\expandafter\space%
839        \csname CoppeAdvisorSurname:\the\count1\endcsname\\}
840    \else
841      \toks@=\expandafter\expandafter\expandafter{%
842        \expandafter\the\expandafter\toks@%
843        \expandafter&\expandafter\space%
844        \csname CoppeAdvisorName:\the\count1\expandafter\endcsname%
845        \expandafter\space\csname CoppeAdvisorSurname:\the\count1\endcsname\\
846      }%
847    \fi
848    \advance\count1 by 1}
849    \the\toks@
850  \end{tabularx}}\par
851  \end{flushright}
852  \vspace*{\fill}
853  \begin{center}
854  \local@cityname\par
855  \local@monthname\ de \number\year
856  \end{center}
857  \end{titlepage}
858  \global\let\maketitle\relax%
859  \global\let\and\relax}

860 \newcommand\makefrontpage{%
861  \begin{center}
862    \sloppy\nohyphens{
863      \if@english
864        \MakeUppercase\foreign@title
865      \else
866        \MakeUppercase\local@title
867      \fi}\par
868    \vspace*{7mm}
869    {\@authname\ \@authsurn}\par
870  \end{center}\par
871  \vspace*{4mm}
872  \frontpage@maintext
873  \vspace*{16mm}
874  \nohyphens{%
875  \noindent\begin{tabularx}{\textwidth}[b]{@{}l@{ }>{\raggedright\arraybackslash}X@{}}
876    \local@advisorstring: &
877    \count1=0
878    \toks@={}
879    \@whilenum \count1<\@advisor \do{%
880    \ifcase\count1 % same as \ifnum0=\count1
881      \toks@=\expandafter{\csname CoppeAdvisorName:\the\count1%
882        \expandafter\endcsname\expandafter\space%
883        \csname CoppeAdvisorSurname:\the\count1\endcsname\\}
884    \else
885      \toks@=\expandafter\expandafter\expandafter{%
886        \expandafter\the\expandafter\toks@%
```

```
887        \expandafter&\expandafter\space%
888          \csname CoppeAdvisorName:\the\count1\expandafter\endcsname%
889          \expandafter\space\csname CoppeAdvisorSurname:\the\count1\endcsname\\
890        }%
891      \fi
892      \advance\count1 by 1}
893      \the\toks@
894    \end{tabularx}\par
895    \vspace*{20mm}
896    \noindent\begin{tabularx}{\textwidth}[b]{@{}l@{ }>{\raggedright\arraybackslash}X@{}}
897      Aprovada por: &
898      \count1=0
899      \toks@={}
900      \@whilenum \count1<\@examiner \do{%
901      \ifcase\count1 % same as \ifnum0=\count1
902        \toks@=\expandafter{\csname CoppeExaminer:\the\count1%
903          \expandafter\endcsname\expandafter\\}
904      \else
905        \toks@=\expandafter\expandafter\expandafter{%
906          \expandafter\the\expandafter\toks@%
907          \expandafter&\expandafter\space%
908          \csname CoppeExaminer:\the\count1\expandafter\endcsname%
909          \expandafter\space\\
910        }%
911      \fi
912      \advance\count1 by 1}
913      \the\toks@
914    \end{tabularx}}\par
915    \vspace*{\fill}
916    \frontpage@bottomtext}

917 \newcommand\coppe@hypersetup{%
918 \begingroup
919    % changes to \toks@ and \count@ are kept local;
920    % it's not necessary for them, but it is usually the case
921    % for \count1, because the first ten counters are written
922    % to the DVI file, thus you got lucky because of PDF output
923    \toks@={}% in this special case not necessary
924    \count@=0 %
925    \@whilenum\count@<\value{keywords}\do{%
926      % * a keyword separator is not necessary,
927      %    if there is just one keyword
928      % * \csname CoppeKeyword:\the\count@\endcsname must be expanded
929      %    at least once, to get rid of the loop depended \count@
930      \ifcase\count@ % same as \ifnum0=\count@
931        \toks@=\expandafter{\csname CoppeKeyword:\the\count@\endcsname}%
932      \else
933        \toks@=\expandafter\expandafter\expandafter{%
934          \expandafter\the\expandafter\toks@
935          \expandafter;\expandafter\space
936          \csname CoppeKeyword:\the\count@\endcsname
937        }%
938      \fi
939      \advance\count@ by 1 %
```

```
940   }%
941   \edef\x{\endgroup
942     \noexpand\hypersetup{%
943       pdfkeywords={\the\toks@}%
944     }%
945   }%
946 \x
947 \hypersetup{%
948   pdfauthor={\@authname\ \@authsurn},
949   pdftitle={\local@title},
950   pdfsubject={\local@doctype\ de \@degreename\ em \local@deptname\ da COPPE/UFRJ},
951   pdfcreator={LaTeX with CoppeTeX toolkit},
952   breaklinks={true},
953   raiselinks={true},
954   pageanchor={true},
955 }}
```

\makecatalog When the document has illustrations, it is required to insert ": il.;" between the number of pages of the textual part and the page dimension. We have created a label to flag the existence of lists of figures. It is checked to be undefined using the plain TeX command \@isundefined [7].

```
956 \newcommand\makecatalog{%
957   \vspace*{\fill}
958   \begin{center}
959     \setlength{\fboxsep}{5mm}
960     \framebox[120mm][c]{\makebox[5mm][c]{}%
961       \begin{minipage}[c]{105mm}
962       \setlength{\parindent}{5mm}
963       \noindent\sloppy\nohyphens\@authsurn,
964       \nohyphens\@authname\par
965       \nohyphens{%
966         \if@english
967           \foreign@title%
968         \else
969           \local@title%
970         \fi/\@authname\ \@authsurn. -- \local@cityname:
971       UFRJ/COPPE, \number\year.}\par
972       \pageref{front:pageno},
973       \pageref{LastPage}
974       p.\@ifundefined{r@cat:lofflag}{}{\pageref{cat:lofflag}} $29,7$cm.\par
975       % There is an issue here. When the last entry must be split between lines,
976       % the spacing between it and the next paragraph becomes smaller.
977       % Should we manually introduce a fixed space? But how could we know that
978       % a name was split? Is this happening yet?
979       \nohyphens{%
980       \begin{tabularx}{100mm}[b]{@{}l@{ }>{\raggedright\arraybackslash}X@{}}
981         \local@advisorstring: &
982         \count1=0
983         \toks@={}
984         \@whilenum \count1<\@advisor \do{%
985         \ifcase\count1 % same as \ifnum0=\count1
986           \toks@=\expandafter{\csname CoppeAdvisorName:\the\count1%
987           \expandafter\endcsname\expandafter\space%
988           \csname CoppeAdvisorSurname:\the\count1\endcsname\\}
```

25

```
989        \else
990          \toks@=\expandafter\expandafter\expandafter{%
991            \expandafter\the\expandafter\toks@
992            \expandafter&\expandafter\space
993            \csname CoppeAdvisorName:\the\count1\expandafter\endcsname%
994            \expandafter\space\csname CoppeAdvisorSurname:\the\count1\endcsname\\
995          }%
996        \fi
997        \advance\count1 by 1}
998        \the\toks@
999      \end{tabularx}}\par
1000     \nohyphens{\local@doctype\ ({\MakeLowercase\@degreename}) --
1001     UFRJ/COPPE/Programa de \local@deptname, \number\year.}\par
1002     Refer{\^ e}ncias Bibliogr{\' a}ficas: p. \pageref{bib:begin} -- \pageref{bib:end}.\par
1003     \count1=0
1004     \count2=1
1005     \nohyphens{\@whilenum \count1<\value{keywords} \do {%
1006       \number\count2. \csname CoppeKeyword:\the\count1 \endcsname.
1007       \advance\count1 by 1
1008       \advance\count2 by 1}
1009     I. \csname CoppeAdvisorSurname:0\endcsname,%
1010     \ \csname CoppeAdvisorName:0\endcsname%
1011     \ifthenelse{\@advisor>1}{\ \emph{et~al.}}{}}.
1012     II. \local@universityname, COPPE, Programa de \local@deptname.
1013     III. T{\' i}tulo.}
1014   \end{minipage}}
1015 \end{center}
1016 \vspace*{\fill}}
```

\dedication

```
1017 \newcommand\dedication[1]{
1018   \gdef\@dedic{#1}
1019     \cleardoublepage
1020     \vspace*{\fill}
1021     \begin{flushright}
1022       \begin{minipage}{60mm}
1023         \raggedleft \it \normalsize \@dedic
1024       \end{minipage}
1025     \end{flushright}}
```

abstract (*env.*) This is a specialization of the abstract in the article standard class.

```
1026 \newenvironment{abstract}{%
1027   \clearpage
1028   \thispagestyle{plain}
1029   \abstract@toptext\par
1030   \vspace*{8.6mm}
1031   \begin{center}
1032     \sloppy\nohyphens{\MakeUppercase\local@title}\par
1033     \vspace*{13.2mm}
1034     \@authname\ \@authsurn \par
1035     \vspace*{7mm}
1036     \local@monthname/\number\year
1037   \end{center}\par
1038   \vspace*{\fill}
```

```
1039    \noindent%
1040    \begin{tabularx}{\textwidth}[b]{@{}l@{ }>{\raggedright\arraybackslash}X@{}}
1041      \local@advisorstring: &
1042      \count1=0
1043      \toks@={}
1044      \@whilenum \count1<\@advisor \do{%
1045      \ifcase\count1 % same as \ifnum0=\count1
1046        \toks@=\expandafter{\csname CoppeAdvisorName:\the\count1%
1047        \expandafter\endcsname\expandafter\space%
1048        \csname CoppeAdvisorSurname:\the\count1\endcsname\\}
1049      \else
1050        \toks@=\expandafter\expandafter\expandafter{%
1051          \expandafter\the\expandafter\toks@
1052          \expandafter&\expandafter\space
1053          \csname CoppeAdvisorName:\the\count1\expandafter\endcsname%
1054          \expandafter\space\csname CoppeAdvisorSurname:\the\count1\endcsname\\
1055        }%
1056      \fi
1057      \advance\count1 by 1}
1058      \the\toks@
1059    \end{tabularx}\par
1060    \vspace*{2mm}
1061    \noindent\local@deptstring: \local@deptname\par
1062    \vspace*{7mm}}{\vspace*{\fill}}
```

foreignabstract (*env.*)

```
1063 \newenvironment{foreignabstract}{%
1064    \clearpage
1065    \thispagestyle{plain}
1066    \begin{otherlanguage}{english}
1067    \foreignabstract@toptext\par
1068    \vspace*{8.6mm}
1069    \begin{center}
1070      \sloppy\nohyphens{\MakeUppercase\foreign@title}\par
1071      \vspace*{13.2mm}
1072      \@authname\ \@authsurn \par
1073      \vspace*{7mm}
1074      \foreign@monthname/\number\year
1075    \end{center}\par
1076    \vspace*{\fill}
1077    \noindent%
1078    \begin{tabularx}{\textwidth}[b]{@{}l@{ }>{\raggedright\arraybackslash}X@{}}
1079      \foreign@advisorstring: &
1080      \count1=0
1081      \toks@={}
1082      \@whilenum \count1<\@advisor \do{%
1083      \ifcase\count1 % same as \ifnum0=\count1
1084        \toks@=\expandafter{\csname CoppeAdvisorName:\the\count1%
1085        \expandafter\endcsname\expandafter\space%
1086        \csname CoppeAdvisorSurname:\the\count1\endcsname\\}
1087      \else
1088        \toks@=\expandafter\expandafter\expandafter{%
1089          \expandafter\the\expandafter\toks@
1090          \expandafter&\expandafter\space
```

```
1091        \csname CoppeAdvisorName:\the\count1\expandafter\endcsname%
1092        \expandafter\space\csname CoppeAdvisorSurname:\the\count1\endcsname\\
1093      }%
1094    \fi
1095    \advance\count1 by 1}
1096    \the\toks@
1097  \end{tabularx}\par
1098  \vspace*{2mm}
1099  \noindent\foreign@deptstring: \foreign@deptname\par
1100  \vspace*{7mm}}{%
1101  \end{otherlanguage}
1102  \vspace*{\fill}
1103  \global\let\@author\@empty
1104  \global\let\@date\@empty
1105  \global\let\foreign@title\@empty
1106  \global\let\foreign@title\relax
1107  \global\let\local@title\@empty
1108  \global\let\local@title\relax
1109  \global\let\author\relax
1110  \global\let\author\relax
1111  \global\let\date\relax}
```

`\listoffigures`

```
1112 \renewcommand\listoffigures{%
1113     \coppe@hasLof
1114     \if@twocolumn
1115       \@restonecoltrue\onecolumn
1116     \else
1117       \@restonecolfalse
1118     \fi
1119     \chapter*{\listfigurename}%
1120       \addcontentsline{toc}{chapter}{\listfigurename}%
1121       \@mkboth{\MakeUppercase\listfigurename}%
1122             {\MakeUppercase\listfigurename}%
1123     \@starttoc{lof}%
1124     \if@restonecol\twocolumn\fi
1125     }
```

`\listoftables`

```
1126 \renewcommand\listoftables{%
1127     \if@twocolumn
1128       \@restonecoltrue\onecolumn
1129     \else
1130       \@restonecolfalse
1131     \fi
1132     \chapter*{\listtablename}%
1133       \addcontentsline{toc}{chapter}{\listtablename}%
1134       \@mkboth{%
1135         \MakeUppercase\listtablename}%
1136        {\MakeUppercase\listtablename}%
1137     \@starttoc{lot}%
1138     \if@restonecol\twocolumn\fi
1139     }
```

```
1140 \newcommand\printlosymbols{%
1141 \renewcommand\glossaryname{\listsymbolname}%
1142 \@input@{\jobname.los}}
```

```
1143 \def\makelosymbols{%
1144   \newwrite\@losfile
1145   \immediate\openout\@losfile=\jobname.syx
1146   \newcommand\symbl[3][]{\@bsphack\begingroup
1147   \ifstrempty{##1}{\def\@tempsymbl{##2=}}{\def\@tempsymbl{##1=}}%
1148           \@sanitize%
1149           \@wrlos{\@tempsymbl}{##2}{##3}}\typeout%
1150   {Writing index of symbols file \jobname.syx}%
1151   \let\makelosymbols\@empty%
1152 }%
1153 \@onlypreamble\makelosymbols

1154 \AtBeginDocument{%
1155 \@ifpackageloaded{hyperref}{%
1156   \newcommand\@wrlos[3]{%
1157     \protected@write\@losfile{}%
1158       {\string\indexentry{#1[#2] #3|hyperpage}{\thepage}}%
1159     \endgroup%
1160     \@esphack}}{%
1161   \newcommand\@wrlos[3]{%
1162     \protected@write\@losfile{}%
1163       {\string\indexentry{#1[#2] #3}{\thepage}}%
1164     \endgroup%
1165     \@esphack}}%
```

```
1166 \newcommand\printloabbreviations{%
1167 \renewcommand\glossaryname{\listabbreviationname}%
1168 \@input@{\jobname.lab}}
```

```
1169 \def\makeloabbreviations{%
1170   \newwrite\@labfile
1171   \immediate\openout\@labfile=\jobname.abx
1172   \newcommand\abbrev[3][]{\@bsphack\begingroup
1173           \ifstrempty{##1}{\def\@tempsymbl{##2=}}{\def\@tempsymbl{##1=}}
1174           \@sanitize
1175           \@wrlab{\@tempsymbl}{##2}{##3}}\typeout
1176   {Writing index of abbreviations file \jobname.abx}%
1177   \let\makeloabbreviations\@empty
1178 }
1179 \@onlypreamble\makeloabbreviations

1180 \AtBeginDocument{%
1181 \@ifpackageloaded{hyperref}{%
1182   \newcommand\@wrlab[3]{%
1183     \protected@write\@labfile{}%
1184       {\string\indexentry{#1[#2] #3|hyperpage}{\thepage}}%
```

```
1185     \endgroup%
1186     \@esphack}}{%
1187   \newcommand\@wrlab[3]{%
1188     \protected@write\@labfile{}%
1189       {\string\indexentry{#1[#2] #3}{\thepage}}%
1190     \endgroup%
1191     \@esphack}}}%

1192 %%%% \AtBeginDocument{%
1193 %%%% \@ifpackageloaded{hyperref}{%
1194 %%%%   \def\@wrlab#1#2{%
1195 %%%% \protected@write\@labfile{}%
1196 %%%%      {\string\indexentry{[#1] #2|hyperpage}{\thepage}}%
1197 %%%%     \endgroup
1198 %%%%     \@esphack}}{%
1199 %%%%   \def\@wrlab#1#2{%
1200 %%%%     \protected@write\@labfile{}%
1201 %%%%      {\string\indexentry{[#1] #2}{\arabic{page}}}%
1202 %%%%     \endgroup
1203 %%%%     \@esphack}}}

1204 % Some macros used to generate cataloging information.
1205 \AtBeginDocument{%
1206   \ltx@ifpackageloaded{hyperref}{
1207     \def\coppe@bibEnd{%
1208       \immediate\write\@auxout{%
1209         \string\newlabel{bib:end}{{}{\arabic{page}}{}{page.\arabic{page}}{}}}}%
1210     \def\coppe@bibBegin{%
1211       \immediate\write\@auxout{%
1212         \string\newlabel{bib:begin}{{}{\arabic{page}}{}{page.\arabic{page}}{}}}}%
1213     \def\coppe@mainBegin{%
1214       \immediate\write\@auxout{%
1215         \string\newlabel{front:pageno}{{}{\Roman{page}}{}{page.\roman{page}}{}}}}%
1216     \def\coppe@hasLof{%
1217       \immediate\write\@auxout{%
1218         \string\newlabel{cat:lofflag}{{}{:~il.;}{}{page.\roman{page}}{}}}}%
1219   }{%
1220     \def\coppe@bibEnd{%
1221       \immediate\write\@auxout{%
1222       \string\newlabel{bib:end}{{}{\arabic{page}}{}}}}%
1223     \def\coppe@bibBegin{%
1224       \immediate\write\@auxout{%
1225       \string\newlabel{bib:begin}{{}{\arabic{page}}{}}}}%
1226     \def\coppe@mainBegin{%
1227       \immediate\write\@auxout{%
1228       \string\newlabel{front:pageno}{{}{\Roman{page}}{}}}}%
1229     \def\coppe@hasLof{%
1230       \immediate\write\@auxout{%
1231       \string\newlabel{cat:lofflag}{{}{:~il.;}{}}}}%
1232   }%
1233 }
1234 \newdimen\bibindent%
1235 \setlength\bibindent{1.5em}%
1236 \renewenvironment{thebibliography}[1]%
1237     {\onehalfspacing%
```

```
1238        \chapter*{\bibname}%
1239        \addcontentsline{toc}{chapter}{\bibname}%
1240        \coppe@bibBegin
1241        \list{\@biblabel{\@arabic\c@enumiv}}%
1242             {\setlength{\labelwidth}{0ex}%
1243               \setlength{\leftmargin}{9.0ex}%
1244               \setlength{\itemindent}{-9.0ex}%
1245               \advance\leftmargin\labelsep%
1246               \@openbib@code%
1247               \usecounter{enumiv}%
1248               \let\p@enumiv\@empty%
1249               \renewcommand\theenumiv{\@arabic\c@enumiv}}%
1250        \sloppy%
1251        \clubpenalty4000%
1252        \@clubpenalty \clubpenalty%
1253        \widowpenalty4000%
1254        \sfcode`\.\@m}%
1255      {\def\@noitemerr%
1256        {\@latex@warning{Empty `thebibliography' environment}}%
1257        \coppe@bibEnd
1258        \endlist}
```

longquote (*env.*)

```
1259 \newlength{\recuolongquote}%
1260 \setlength{\recuolongquote}{4cm}%
1261 \newenvironment*{longquote}[1][default]{%
1262  \list{}%
1263  \footnotesize%
1264  \addtolength{\leftskip}{\recuolongquote}%
1265  \item[]%
1266  \singlespacing%
1267  \ifthenelse{\not\equal{#1}{default}}{\itshape\selectlanguage{#1}}{}%
1268 }{\endlist}%

1269 \newenvironment{theglossary}{%
1270  \if@twocolumn%
1271     \@restonecoltrue\onecolumn%
1272  \else%
1273     \@restonecolfalse%
1274  \fi%
1275  \@mkboth{\MakeUppercase\glossaryname}%
1276  {\MakeUppercase\glossaryname}%
1277  \chapter*{\glossaryname}%
1278  \addcontentsline{toc}{chapter}{\glossaryname}
1279  \list{}
1280  {\setlength{\listparindent}{0in}%
1281   \setlength{\labelwidth}{1.0in}%
1282   \setlength{\leftmargin}{1.5in}%
1283   \setlength{\labelsep}{0.5in}%
1284   \setlength{\itemindent}{0in}}%
1285   \sloppy}%
1286   {\if@restonecol\twocolumn\fi%
1287 \endlist}
1288 %
```

```latex
1289 \renewenvironment{theindex}{%
1290   \if@twocolumn
1291     \@restonecolfalse
1292   \else
1293     \@restonecoltrue
1294   \fi
1295   \twocolumn[\@makeschapterhead{\indexname}]%
1296   \@mkboth{\MakeUppercase\indexname}%
1297   {\MakeUppercase\indexname}%
1298   \thispagestyle{plain}\parindent\z@
1299   \addcontentsline{toc}{chapter}{\indexname}
1300   \parskip\z@ \@plus .3\p@\relax
1301   \columnseprule \z@
1302   \columnsep 35\p@
1303   \let\item\@idxitem}
1304   {\if@restonecol\onecolumn\else\clearpage\fi}
1305 \if@english
1306   \newcommand\listabbreviationname{List of Abbreviations}
1307   \newcommand\listsymbolname{List of Symbols}
1308   \newcommand\glossaryname{Glossary}
1309 \else
1310   \newcommand\listabbreviationname{Lista de Abreviaturas}
1311   \newcommand\listsymbolname{Lista de S{\' i}mbolos}
1312   \newcommand\glossaryname{Gloss{\' a}rio}
1313 \fi
1314 %
1315 \newcommand\local@advisorstring{Orientador}
1316 \newcommand\foreign@advisorstring{Advisor}
1317 \ifthenelse{\boolean{maledoc}}{%
1318   \newcommand\local@approvedname{Examinado por}%
1319 }{%
1320   \newcommand\local@approvedname{Examinada por}%
1321 }
1322 \newcommand\local@universityname{Universidade Federal do Rio de Janeiro}
1323 \newcommand\local@deptstring{Programa}
1324 \newcommand\foreign@deptstring{Department}
1325 \newcommand\local@cityname{Rio de Janeiro}
1326 \newcommand\local@statename{RJ}
1327 \newcommand\local@countryname{Brasil}
1328 %
1329 \newcommand\frontcover@maintext{
1330   \sloppy\nohyphens{\local@doctype\ de \@degreename\
1331   \ifthenelse{\boolean{maledoc}}{apresentado}{apresentada}
1332   ao Programa de P{\' o}s-gradua{\c c}{\~ a}o em \local@deptname,
1333   COPPE, da \local@universityname, como parte dos requisitos
1334   necess{\' a}rios {\` a} obten{\c c}{\~ a}o do t{\' i}tulo de
1335   \local@degname\ em \local@deptname.}
1336 }
1337 %
1338 \newcommand\frontpage@maintext{
1339   \noindent {\MakeUppercase\local@doctype}
1340   \ifthenelse{\boolean{maledoc}}{SUBMETIDO}{SUBMETIDA}
1341   \sloppy\nohyphens{AO CORPO DOCENTE DO INSTITUTO ALBERTO LUIZ COIMBRA
1342   DE P{\' O}S-GRADUA{\c C}{\~ A}O E PESQUISA DE ENGENHARIA DA
```

```
1343   UNIVERSIDADE FEDERAL DO RIO DE JANEIRO COMO PARTE DOS REQUISITOS
1344   NECESS{\' A}RIOS PARA A OBTEN{\c C}{\~ A}O DO GRAU DE
1345   {\MakeUppercase\local@degname} EM CI{\^E}NCIAS EM
1346   {\MakeUppercase\local@deptname.\par}}%
1347 }
1348 %
1349 \newcommand\frontpage@bottomtext{%
1350   \begin{center}
1351   {\MakeUppercase{\local@cityname, \local@statename\ -- \local@countryname}}\par
1352   {\MakeUppercase\local@monthname\ DE \number\year}
1353   \end{center}%
1354 }
1355 %
1356 \newcommand\abstract@toptext{%
1357   \noindent Resumo \ifthenelse{\boolean{maledoc}}{do}{da}
1358   \local@doctype\ \ifthenelse{\boolean{maledoc}}{apresentado}{apresentada}
1359   \sloppy\nohyphens{{\` a] COPPE/UFRJ como parte dos requisitos
1360   necess{\' a}rios para a obten{\c c}{\~ a}o do grau de
1361   \local@degname\ em Ci{\^ e}ncias (\@degree)}
1362 }
1363 \newcommand\foreignabstract@toptext{%
1364   \noindent \sloppy\nohyphens{Abstract of \foreign@doctype\ presented to
1365   COPPE/UFRJ as a partial fulfillment of the requirements for the
1366   degree of \foreign@degname\ of Science (\@degree)}
1367 }
1368 %

1369 ⟨/class⟩

1370 ⟨∗glossary⟩
1371 actual '='
1372 quote '!'
1373 level '>'
1374 %%%% delim_0    ", p. "
1375 delim_0 "\\dotfill "
1376 lethead_flag   0
1377 headings_flag 0
1378 preamble
1379 "\n\\begin{theglossary}\n  \\makeatletter"
1380 postamble
1381 "\n  \\end{theglossary}\n"
1382 ⟨/glossary⟩

1383 \newcommand{\annex}{
1384     \iflanguage{brazilian}
1385         {\renewcommand{\appendixname}{Anexo}}
1386         {\renewcommand{\appendixname}{Annex}}
1387     \appendix
1388 }
```

Acknowledgments

helpful comments. The authors would like to thank the National Council for Scientific and Technological Development (CNPq) of Brazil.

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[4] Oren Patashnik. Bibtexing. Documentation for general BibTEX users, February 1988.

[5] Oren Patashnik. Designing bibtex styles. The part of BibTeX 's documentation that's not meant for general users, February 1988.

[6] William Strunk, Jr. and E. B. White. *The Elements of Style.* Macmillan, 3 edition, 1979.

[7] TEX Frequently Asked Questions.

Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

35

Change History

v0.0
    General: Creation Date. 1
v0.1
    General: Documentation:
        bibliography fixed, title
        translation. 1
        Sourceforge submission. 1
v0.2
    General: Unification of the code
        for the list of symbols and
        abbreviations. 1
v0.3
    General: Added 'draft' option. . . . 1
    \maketitle: Added number of
        examiners test. 23
        Generalization. 23
v0.4
    General: Beta documentation. . . . 1
v0.5
    abstract: Changed from macro to
        environment. 27
    \backmatter: Added mainmatter
        pages counter. 22
    foreignabstract: Changed from
        macro to environment. 28
v1.0
    General: First CoppeTeX release. . 1

v2.0
    General: CoppeTeX release 2.0. . . . 1
v2.1
    General: CoppeTeX release 2.1:
        Matching the new rules. 1
    \advisor: Advisors, co-advisors,
        co-co-advisors, etc., all of them
        are simply considered advisors. 20
v2.2
    General: Matching new guidelines,
        including new logo. 1
v2.2.2
    General: Fixed some text constants
        in .bib and documented it here. 1
v3.0
    General: Added support for
        monographs in English. 19
        New approval page layout. . . . 24
    \department: Added new course
        on Nanotechnology. 20
    \examiner: Examiners expansion
        without degree. 20
v3.1
    \department: Included a sort key
        in symbl 20
v3.2
    General: Fixed version problem