



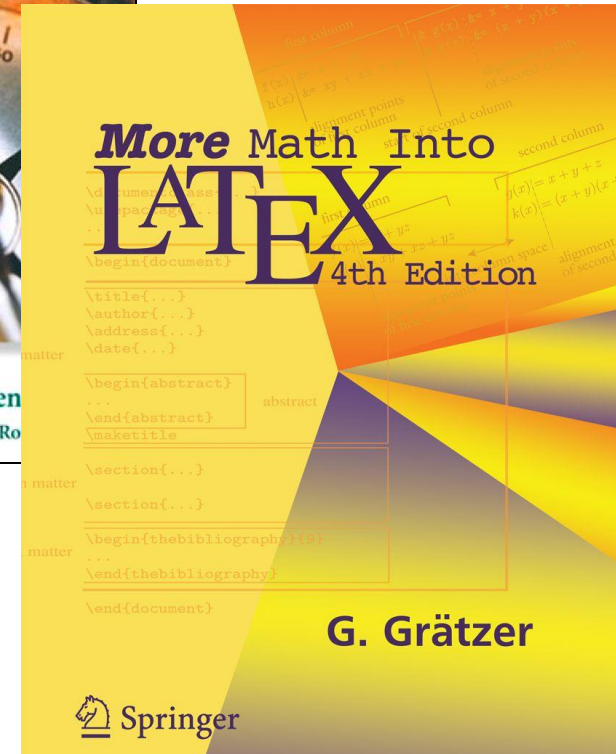
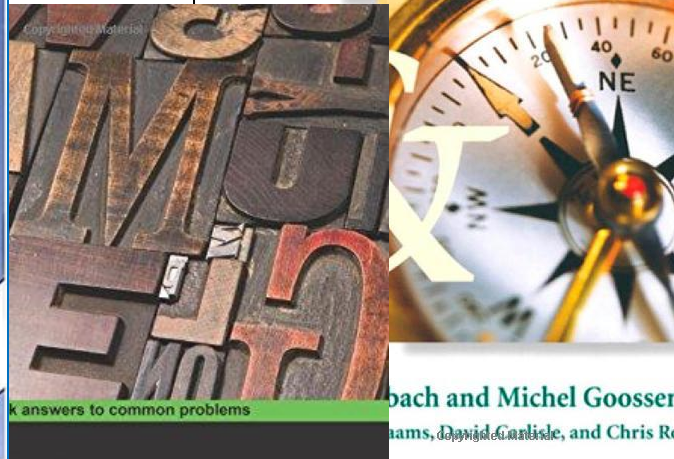
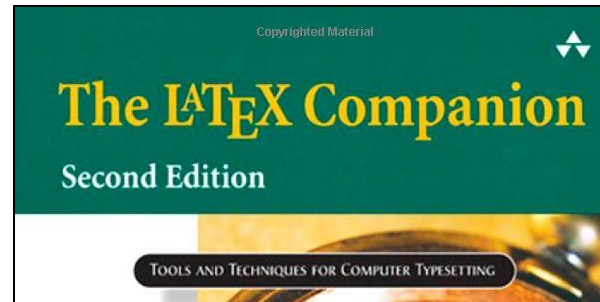
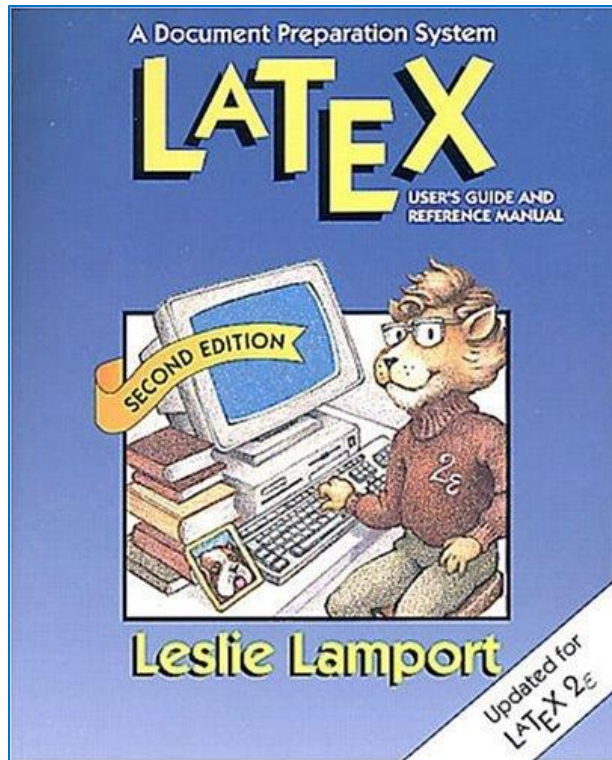
PARADIGMAS DE LINGUAGENS DE PROGRAMAÇÃO

Introdução ao L^AT_EX

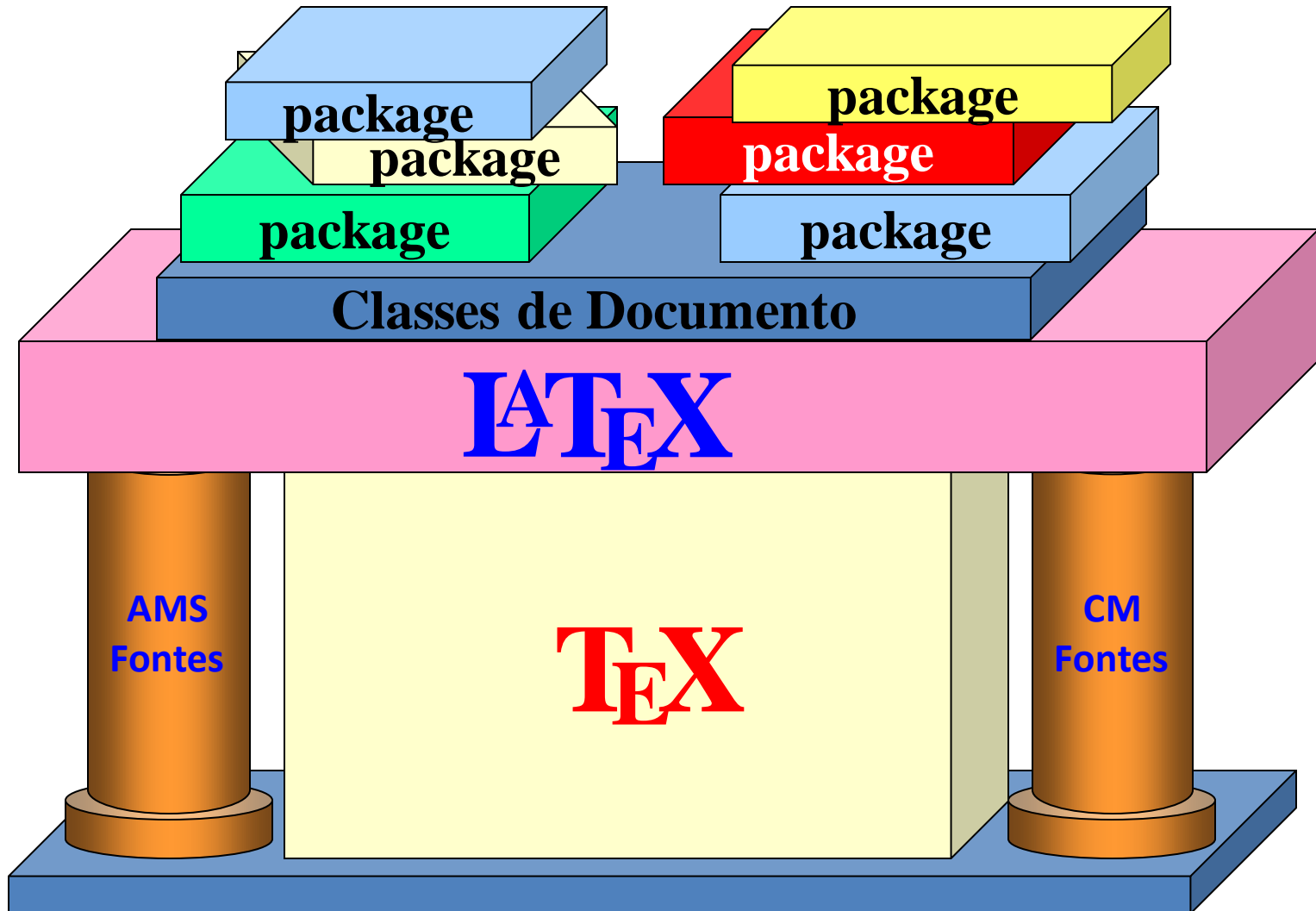
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ausberto.castro@gmail.com

Bibliografia



Sistema TeX - LaTeX



Ferramentas TeX - LaTeX

❖ Linguagem LaTeX

- ❑ Comandos da linguagem : `\comando`
- ❑ O arquivo principal deve ser **programado** e **compilado**!

❖ Editor de Texto

- ❑ WinEdt, TexStudio, TeXnicCenter

❖ Compilador

- ❑ Sistema MikTeX 2.9 (Windows)

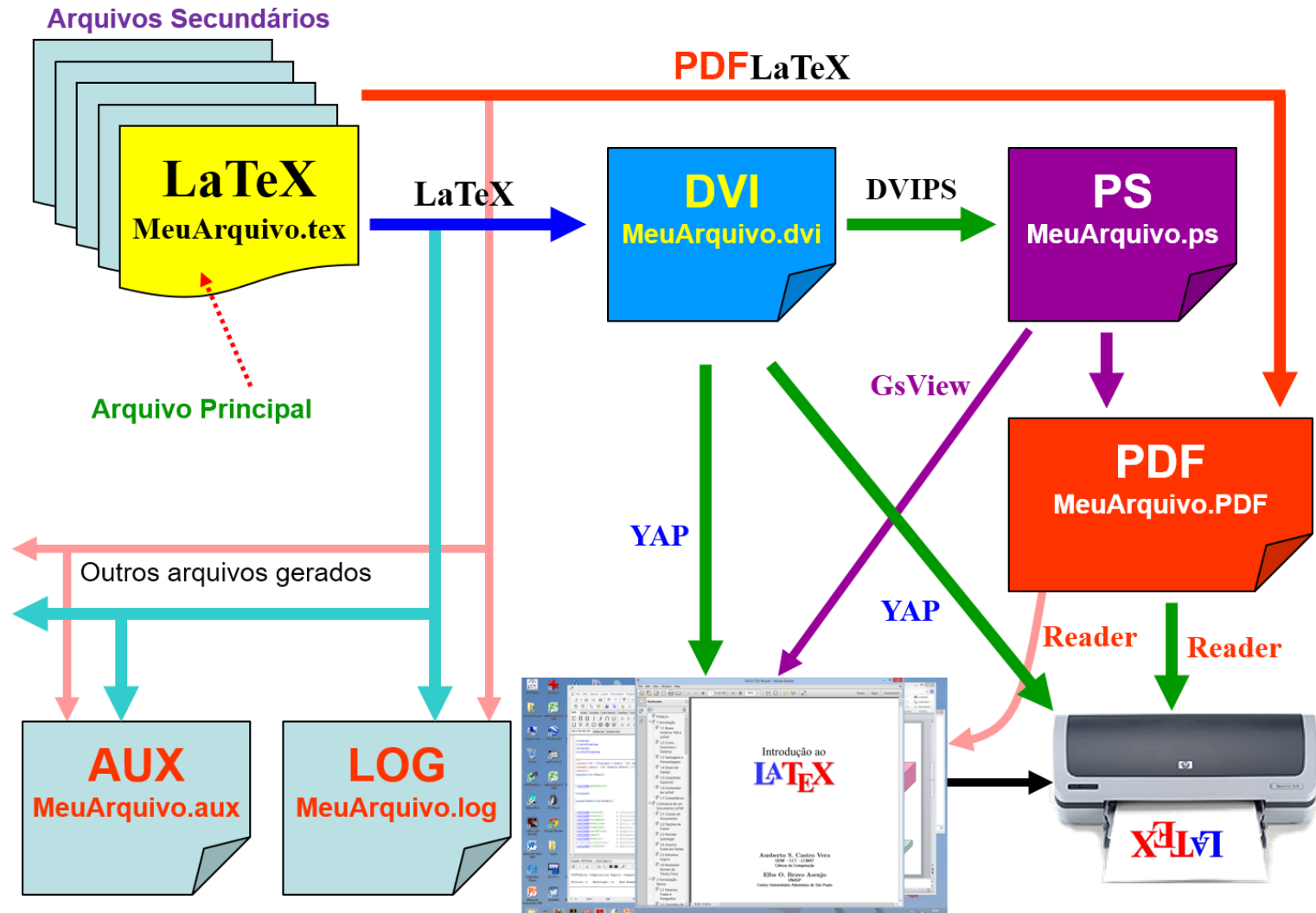
❖ Pacotes LaTeX

- ❑ Arquivos tipo *.tex *.sty : `\usepackage{pacote}`

❖ Outras ferramentas

- ❑ Para fazer gráficos, diagramas, bibliografia, dicionários, visualizadores, etc.

O processo de Compilar Documentos



Documento LaTeX fonte

```
\documentclass{ }
```

```
\usepackage{ }  
\usepackage{ }
```

```
\begin{document}
```

```
Texto ASCII, texto ASCII  
Texto ASCII, texto ASCII  
Texto ASCII, texto ASCII  
Texto ASCII, texto ASCII  
Texto ASCII, texto ASCII
```

```
\end{document}
```

***Tipo de documento**

[Preâmbulo]

***Corpo do documento**

ASCII (*American Standard Code for Information Interchange*)

Tipos de documentos

```
\documentclass{ }
```

***Tipo de documento**

Tipo de Documento	Comando LaTeX	Documento
AMS Article	<code>\documentclass{amsart}</code>	Artigo AMS
Article	<code>\documentclass{article}</code>	Artigo
Report	<code>\documentclass{report}</code>	Relatório
Book	<code>\documentclass{book}</code>	Livro
Letter	<code>\documentclass{letter}</code>	Carta

Comandos LaTeX

`\nomedocomando` **[opcional]** {obrigatório}

`\documentclass[12pt]{article}`

`\usepackage` **[parâmetros]** {nome do pacote}

```
\begin{NomeDoAmbiente}
    texto ASCII
    texto ASCII
    texto ASCII
\end{NomeDoAmbiente}.
```

Ambientes
LaTeX

Principais pacotes LaTeX

Pacote	Uso
<code>\usepackage[brazil]{babel}</code>	gera datas e nomes em português brasileiro
<code>\usepackage[utf8]{inputenc}</code>	permite o uso de caracteres com acentos
<code>\usepackage{amsmath}</code>	permite o uso de comandos matemáticos
<code>\usepackage{amssymb}</code>	Permite uso de símbolos matemáticos λ π ω ξ
<code>\usepackage{amsfonts}</code>	Permite uso de fontes matemáticas
<code>\usepackage{color}</code>	pacote para colorir o texto.
<code>\usepackage{xcolor}</code>	Extensões de cor
<code>\usepackage{tcolorbox}</code>	Pacote para caixas de texto coloridas
<code>\usepackage{graphicx}</code>	permite incluir figuras

Caracteres Especiais no LaTeX

- **NÃO** podem ser utilizados como parte do texto do documento: eles tem significado especial
 - # parâmetro em comandos LaTeX
 - \$ uso matemático
 - % para comentário
 - ^ como expoente ou potência
 - & separador de colunas
 - _ subíndice (underline)
 - { } para conjunto (de comandos, de nomes, de ambientes, etc.)
 - ~ juntar dois strings
 - \ comando LaTeX
- **Para utilizar:**
 - \& \\$ \# \% _ \{ \} \^{} \~{} \textbackslash

Matemática no LaTeX

- Matemática na linha de texto:
dentro dos símbolos a b c d e texto normal

Fórmula de uma equação $x^2 + y^2 = 0$ dentro da linha de texto

- Matemática no parágrafo (fórmula matemática):
dentro dos símbolos

$$a^2 + b^2 = c^2$$

a b c d e

$$a^2 + b^2 = c^2$$

ou dentro dos símbolos

$$a^2 + b^2 = c^2$$

a b c d e

$$a^2 + b^2 = c^2$$

Fórmula de uma equação

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

centralizado como parágrafo

Tamanho do Texto

`{\tiny` o menor}
`{\scriptsize` muito pequeno}
`{\footnotesize` menor}
`{\small` pequeno}
`{\large` grande}
`{\Large` maior}
`{\LARGE` maior ainda}
`{\huge` ainda maior}
`{\Huge` o maior}

o menor
muito pequeno
menor
pequeno
grande
maior
maior ainda
ainda maior
o maior

Estilo do Texto

`\emph{ênfase}`

ênfase

`\textit{itálico}`

itálico

`\textbf{negrito}`

negrito

`\textrm{romano}`

romano

`\textsf{sans serif}`

sans serif

`\texttt{máquina de escrever}`

máquina de escrever

`\textsc{caixa alta}`

CAIXA ALTA

LaTeX na Internet

- Compilador MiKTeX - <https://miktex.org/>
- Editor TexStudio - <https://www.texstudio.org/>
- Editor WinEdt - <http://www.winedt.com/>
- Bibliografia - https://en.wikibooks.org/wiki/LaTeX/Bibliography_Management
- JabRef - <https://www.jabref.org/>
- Repositório LaTeX CTAN - <https://www.ctan.org/>
- ABNTeX - <https://www.abntex.net.br/>

CTAN.ORG

Arquivo Editar Exibir Histórico Favoritos Ferramentas Ajuda

UOL - O melhor conteúdo X Inbox (1) - ascv@uenf.br - Unif... X Miguel Ascon - Así robaron los... X Página Inicial / Twitter X gRenal ao vivo - Pesquisa Goo... X CTAN: Comprehensive TeX Arch... X

https://www.ctan.org

CTAN Comprehensive TeX Archive Network

Login Join Settings Help

Cover Upload Browse Search

Location: CTAN Comprehensive TeX Archive Network

The Comprehensive TeX Archive Network

The Comprehensive TeX Archive Network (CTAN) is the central place for all kinds of material around TeX. CTAN has currently [5815 packages](#). [2664 contributors](#) have contributed to it. Most of the packages are free and can be downloaded and used immediately.

Announcements on CTAN-announce

You can see what's new and even get informed about new or updated packages on CTAN.

- 2020-03-12 New on CTAN: [oops](#)
- 2020-03-12 New on CTAN: [langsci-avm](#)
- 2020-03-12 CTAN Update: [unicode-alphabets](#)
- 2020-03-12 CTAN update: [cases](#)

[more](#)

Activity on CTAN

An active TeX community takes care that CTAN is updated and extended regularly. CTAN receives usually more than 100 uploads per month.

300
200
100
0

2013 2014 2015 2016 2017 2018 2019 2020

Did you know?

The topic [Rule](#) in the TeX Catalogue has 5 packages for produce rules within a document.

[more](#)

TeX

TeX is a typesetting program designed for high-quality composition of material that contains a lot of mathematical and technical expressions. It has been adopted by many authors and publishers who generate technical books and papers. It was created by Professor [Donald E. Knuth](#) of Stanford University, originally for preparation of his book series "[The Art of Computer Programming](#)". TeX has been made freely available by Knuth.

From these origins a whole eco-system of distributions, macro packages, and supporting programs has arisen.

LaTeX e Bibliografia

https://en.wikibooks.org/wiki/LaTeX/Bibliography_Management

← → ↺


Importado do Firefox

https://en.wikibooks.org/wiki/LaTeX/Bibliography_Management

🔖 ☆

📧 ⬇️ 🌐 📺 📱 📄 🗃️ 🗨️

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Sister projects

Wikipedia

Wikiversity

Wiktionary

Wikiquote

Wikisource

Wikinews

Wikivoyage

Commons

Wikidata


MediaWiki

The Wikibooks community has accepted [video game strategy guides](#) on this wiki! See [Wikibooks:Strategy guides](#) for the newly-created policy on strategy games. We're looking forward to your contributions.


[dismiss]

LaTeX/Bibliography Management

< LaTeX



This page may need to be updated to reflect current knowledge.
You can [help update it](#), [discuss progress](#), or [request assistance](#).



This module may require a complete rewrite in order to suit its intended audience.
You can help rewrite it. Please see the [relevant discussion](#).

LaTeX

L^AT_EX

For any academic/research writing, incorporating references into a document is an important task. Fortunately, LaTeX has a variety of features that make dealing with references much simpler, including built-in support for citing references. However, a much more powerful and flexible solution is achieved thanks to an auxiliary tool called [BibTeX](#)® (which comes bundled as standard with LaTeX). Recently, BibTeX has been succeeded by BibLaTeX, a tool configurable within LaTeX syntax.

BibTeX provides for the storage of all references in an external, flat-file database. (BibLaTeX uses this same syntax.) This database can be referenced in any LaTeX document, and citations made to any record that is contained within the file. This is often more convenient than embedding them at the end of every document written; a centralized bibliography source can be linked to as many documents as desired (write once, read many!). Of course, bibliographies can be split over as many files as one wishes, so there can be a file containing sources concerning topic A (`a.bib`) and another concerning topic B (`b.bib`). When writing about topic AB, both of these files can be linked into the document (perhaps in addition to sources `ab.bib` specific to topic AB).

Contents [hide]

1 Embedded system

2 Citations

2.1 Referring more specifically

2.2 Multiple citations

2.3 Bibliography styles

2.4 No cite

2.5 Natbib

2.5.1 Customization

3 BibTeX

3.1 Authors

3.2 Standard templates

3.3 Non-standard templates

3.4 Preserving case of letters

3.5 A few additional examples

3.6 Getting current LaTeX document to use your .bib file

3.7 Why won't LaTeX generate any output?

3.8 Including URLs in bibliography

3.9 Customizing bibliography appearance

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16

Matemática e LaTeX

No Preâmulos:

```
\usepackage{amsmath}  
\usepackage{amsthm}  
\usepackage{amsfonts}  
\usepackage{dsfont}
```

No Texto:

- **Modo texto**

texto $fórmula$ texto

entre o símbolo \$ $ax + b = 0$ \$. Por exemplo, de uma variável a ou
mo uma fórmula $ax^2 + bx + c = 0$. Observe que $\lim_{k \rightarrow 1} (x + y)^k / (x - 1)$
gral $\int_a^b f(x) dx$ ou a somatória $y = \sum_{k=0}^N X^k$ tem aspectos diferentes

- **Modo matemático**

$$x^2 + y^2 = z^2$$

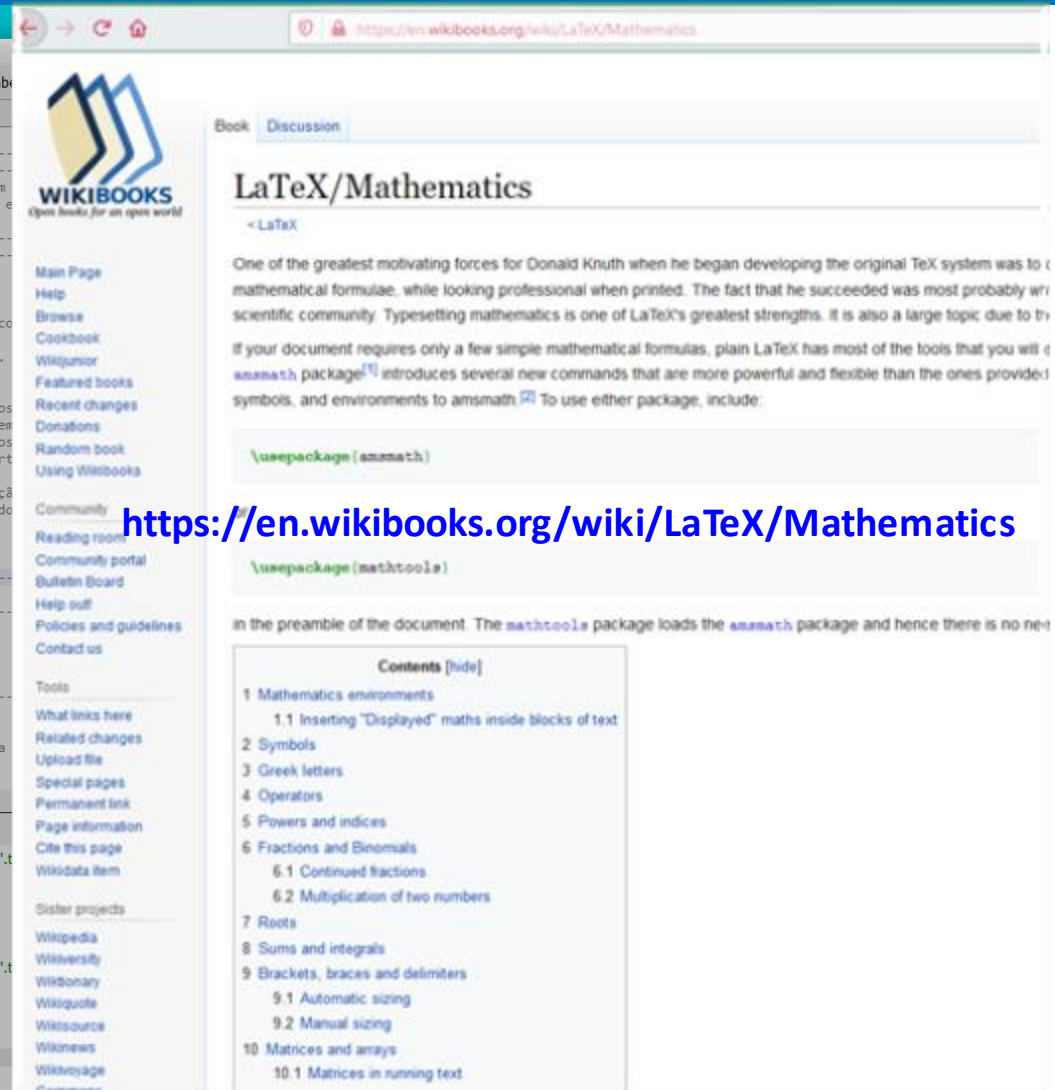
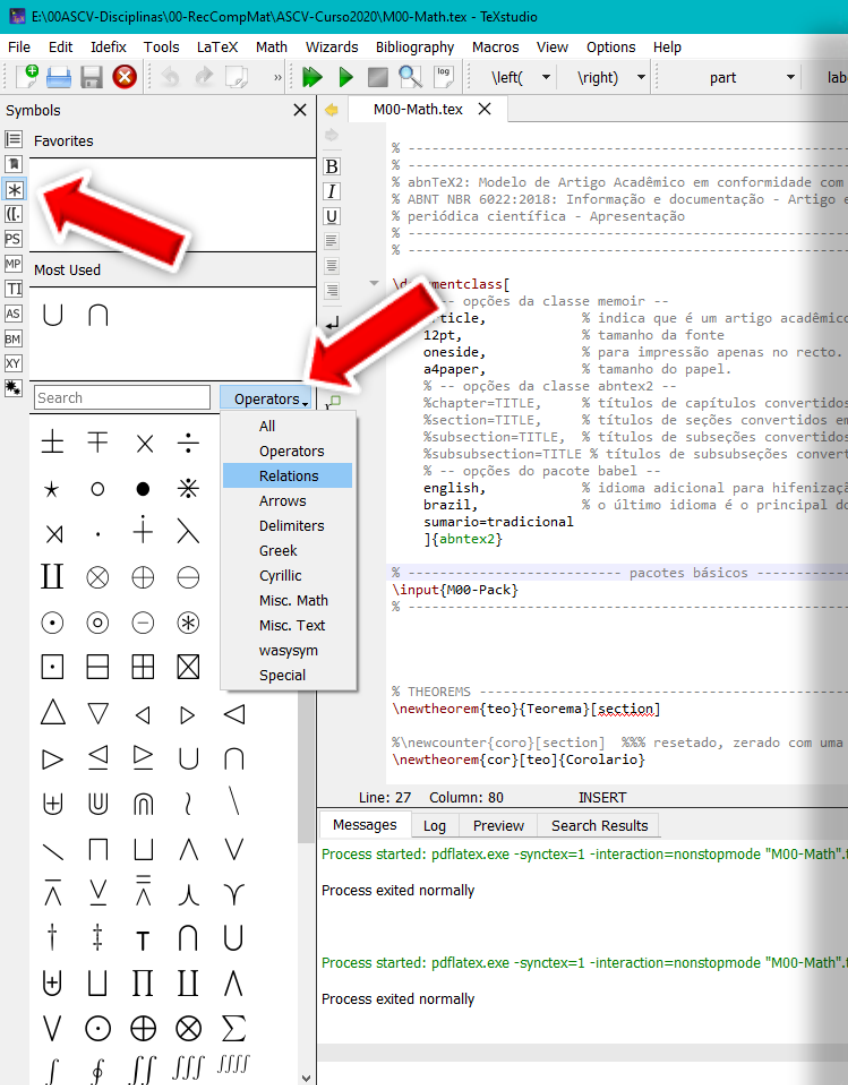
$$fórmula$$

$$x^2 + y^2 = z^2$$

entre os símbolos
$$x^2 + y^2 = z^2$$
 e
$$x^2 + y^2 = z^2$$
. Por exemplo:

$$y = \sum_{k=0}^N X^k \quad \int_a^b f(x) dx$$

Matemática e LaTeX



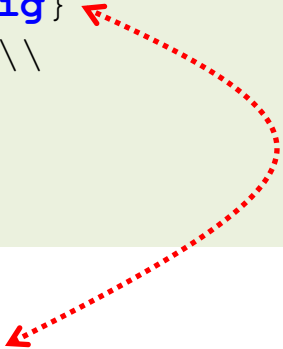
Gráficos no LaTeX

No Préâmulos:

```
\usepackage{graphicx}           %% Pacote para gráficos, Imagens
\graphicspath{{Pictures/}{Imagens/}{Figuras/}} %% caminho da pasta
\usepackage{here}
```

No Texto:

```
\begin{figure}[H]                %% [!ht]
  \begin{center}
    \caption{Titulo da Figura}    \label{NomeRefFig}
    \includegraphics[width =10cm]{NomeArquivo} \\
    {\small Fonte: O autor}
  \end{center}
\end{figure}
```



Toda figura deve ser citada:

... Como mostrada na Fig. **\ref{NomeRefFig}**,

LaTeX no PowerPoint

IguanaTex

Quick links: [\[Index\]](#) [\[FAQ\]](#) [\[Google Group\]](#)

Latest version:

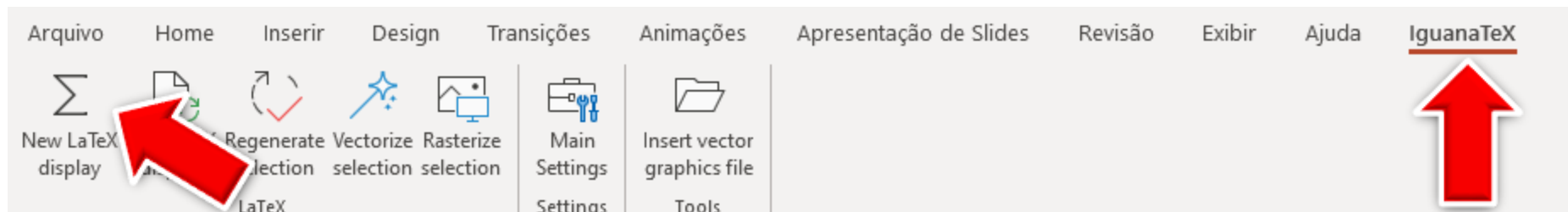
The latest version of IguanaTex (currently v1.58 -- October 10, 2020) should work for all users, on 32-bit or 64-bit Windows, running 32-bit or 64-bit MS Office, on PowerPoint 2003, 2007, 2010, 2013, 2016, 2019, as well as Office 365.

Recommended download (most users): [IguanaTex v1.58 \(.ppam\)](#) (October 10, 2020)

MD5: b8350008c4823cf997c4e906a580e4d4

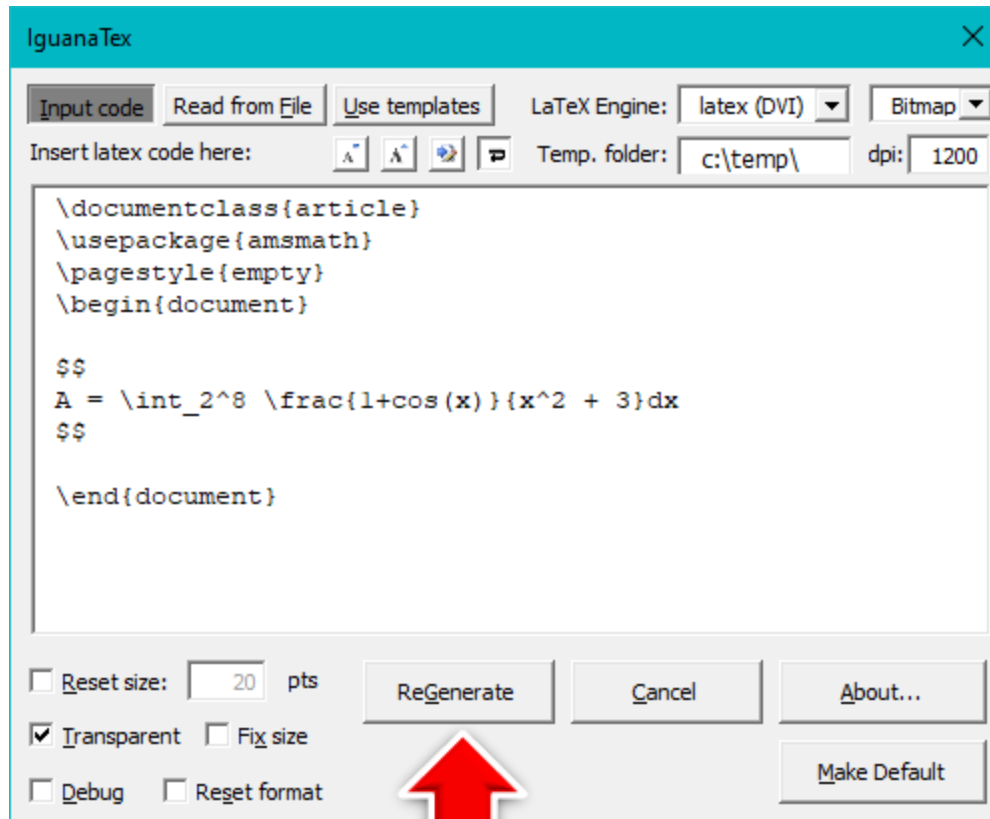
SHA256: 060184f6d1f83fbadf4ce71d53293492a3e99f6ec4cf7dd356727ce4ff682ad

Important note regarding malware detections: Some anti-virus softwares and firewalls report IguanaTex_v1_58.ppam as malware, sometimes even blocking download. After careful review of the code, I believe that these are **false positives** ([more details](#) at the bottom of this page). If you are having difficulties downloading the file above, the [password protected .zip file containing the add-in](#) (password: IguanaTex) should be fine. You can also try white-listing the file with your anti-virus software, or try the [.pptm source](#) (for the source version, open and "save as" a .ppam add-in file, then load that add-in).



LaTeX no PowerPoint

IguanaTex



$$A = \int_2^8 \frac{1 + \cos(x)}{x^2 + 3} dx$$

Obs. Deve estar instalado o Miktex





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