A LaTeX Templete, 一个 LaTeX 模板

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2022 年 10 月 2 日

1 Test Example

这是一个中文-英语-法语混排的多语言模板。

C'est un template multilangue pour l'utilisation chinois-anglais-français.

This is a multilanguage template for chinese-english-french.

2 Copyright

3 Mathematic Tools:`LCS27symbols`

3.1 Regrouping powerful mathematic packages!

Many mathematical symbols are defined by multiple LaTeX packages, the package `LCS27symbols` regroups them!

- `amsmath`: basic mathematic packages, providing format such as mathematic symbols and equations.
- `amsfonts`: mathematic fonts.
- `mathrsfs`: mathematic fonts.
- `bbm`: mathematic fonts.
- `amsthm`: theorem environment.
- `amssymb`: advance mathematic symbols.
- `mathtools` : advance mathematic symbols.
- `siunitx` : scientific notation(*E.g.*To write 2×10^9 you just need `\num{2e+9}`).

- `stmaryrd`: binary operator symbols.

For a quick-check webpage, you can go to `https://oeis.org/wiki/List_of_LaTeX_mathematical_symbols`.

3.2 Autodefined symbols

The package `LCS27symbols` also defines several symbols, especially useful for mechanic fileds!

`\deri{a}{b}`	$\frac{\mathrm{d}a}{\mathrm{d}b}$
`\deriN{a}{b}{n}`	$\frac{\mathrm{d}^n a}{\mathrm{d}b^n}$
`\ParDeri{a}{b}`	$\frac{\partial a}{\partial b}$
`\ParDeriN{a}{b}{n}`	$\frac{\partial^n a}{\partial b^n}$
`\Deri{a}{b}`	$\frac{\mathrm{D}a}{\mathrm{D}b}$
`\DeriN{a}{b}{n}`	$\frac{\mathrm{D}^n a}{\mathrm{D}b^n}$
`a\laplace b`	$a\triangle b$
`\abs \scalaire \bbs`	$\boldsymbol{a}\cdot\boldsymbol{b}$
`a\nabla b, \cbs \nablabs \dbs`	$a\nabla b, \boldsymbol{c}\boldsymbol{\nabla}\boldsymbol{d}$
`\ssi,\iff`	$\Longleftrightarrow$, $\Longleftrightarrow$
`\Abb \gbb \Onebb`	$\mathbb{Ag}\mathbb{1}$
`\Abf \bbf \Onebf`	$\mathbf{Ab1}$
`\Abs,\bbs,\Gammabs,\deltabs,\varphibs, \nablabs`	$\boldsymbol{A},\boldsymbol{b},\boldsymbol{\Gamma},\boldsymbol{\delta},\boldsymbol{\varphi},\boldsymbol{\nabla}$
`\Ao,\bo,\Gammao,\deltao,\arphio,\nablao,\Oneo`	$\overline{A},\overline{b},\overline{\Gamma},\overline{\delta},\overline{\varphi},\overline{\nabla},\overline{1}$
`\Aoo,\boo,\Gammaoo,\deltaoo,\varphioo,\nablaoo,\Oneoo`	$\overline{\overline{A}},\overline{\overline{b}},\overline{\overline{\Gamma}},\overline{\overline{\delta}},\overline{\overline{\varphi}},\overline{\overline{\nabla}},\overline{\overline{1}}$
`\Ad,\bd,\Gammad,\deltad,\varphid,\nablad,\Oned`	$\underline{A},\underline{b},\underline{\Gamma},\underline{\delta},\underline{\varphi},\underline{\nabla},\underline{1}$
`\Add,\bdd,\Gammadd,\deltadd,\varphidd,\nabladd,\Onedd`	$\underline{\underline{A}},\underline{\underline{b}},\underline{\underline{\Gamma}},\underline{\underline{\delta}},\underline{\underline{\varphi}},\underline{\underline{\nabla}},\underline{\underline{1}}$
`\Acal`	$\mathcal{A}$
`\setR,\setC,\setN,\setZ,\setRR`	$\mathbb{R},\mathbb{C},\mathbb{N},\mathbb{Z},\mathbb{R}\times\mathbb{R}$
`\rel`	$\mathcal{R}$
`\eg,\Eg`	*e.g.*, *E.g.*
`\ie,\Ie`	*i.e.*, *I.e.*
`\cf,\Cf`	*c.f.*, *C.f.*
`\etc,\vs,\wrt,\dof`	*etc.*, *vs.*, *w.r.t.*, *d.o.f.*
`\etal,\resp,\st,\aka,\abr`	*et al.*, *resp.*, *s.t.*, *a.k.a.*, *abr.*
`\tsum`	$\sum$
`\grad \xbs`	$\nabla\boldsymbol{x}$
`\norm{a}`	$\|a\|$
`\Intv{a}{b}`	$[a,b]$
`\IntIntv{a}{b}`	$[\![a,b]\!]$
`\UpperInt{a}`	$\lceil a\rceil$
`\LowerInt{a}`	$\lfloor a\rfloor$