

# A L<sup>A</sup>T<sub>E</sub>X Template, 一个 L<sup>A</sup>T<sub>E</sub>X 模板

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## 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

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## 3 Mathematic Tools:LCS27symbols

### 3.1 Regrouping powerful mathematic packages!

Many mathematical symbols are defined by multiple L<sup>A</sup>T<sub>E</sub>X 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  $2 \times 10^9$  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](https://oeis.org/wiki/List_of_LaTeX_mathematical_symbols).

## 3.2 Autodefined symbols

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

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