# A LATEX Templete, 一个 LATEX 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 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  $2 \times 10^9$  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.

#### 3.2 Autodefined symbols

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

```
\det\{a\}\{b\}
                                    \deriN{a}{b}{n}
                                     \ParDeri{a}{b}
                                 \ParDeriN{a}{b}{n}
                                        \Deri{a}{b}
                                    \DeriN{a}{b}{n}
                                         a\laplace b
                                                                                                                             a \cdot b
                                \abs \scalaire \bbs
                       a\nabla b, \cbs \nablabs \dbs
                                                                                                                        a\nabla b, c\nabla d
                                          \ssi,\iff
                                                                                                                        \iff, \iff
                                    \Abb \gbb \Onebb
                                                                                                                             Ag1
                                    \Abf \bbf \Onebf
                                                                                                                             Ab1
      \Abs,\bbs,\Gammabs,\deltabs,\varphibs, \nablabs
                                                                                                                    A, b, \Gamma, \delta, \varphi, \nabla
                                                                                                                   \overline{A}, \overline{b}, \overline{\Gamma}, \overline{\delta}, \overline{\varphi}, \overline{\nabla}, \overline{1}
        \Ao,\bo,\Gammao,\deltao,\arphio,\nablao,\Oneo
                                                                                                                   \overline{\overline{A}}, \overline{\overline{b}}, \overline{\overline{\Gamma}}, \overline{\overline{\delta}}, \overline{\overline{\varphi}}, \overline{\overline{\nabla}}, \overline{\overline{1}}
\Aoo,\boo,\Gammaoo,\deltaoo,\varphioo,\nablaoo,\Oneoo
                                                                                                                   \underline{A}, \underline{b}, \underline{\Gamma}, \underline{\delta}, \varphi, \underline{\nabla}, \underline{1}
       \Ad,\bd,\Gammad,\deltad,\varphid,\nablad,\Oned
                                                                                                                   \underline{A}, \underline{b}, \underline{\Gamma}, \underline{\delta}, \overline{\varphi}, \underline{\nabla}, \underline{1}
\Add,\bdd,\Gammadd,\deltadd,\varphidd,\nabladd,\Onedd
                                              \Acal
                                                                                                                               \mathcal{A}
                       \setR,\setC,\setN,\setZ,\setRR
                                                                                                                   \mathbb{R}, \mathbb{C}, \mathbb{N}, \mathbb{Z}, \mathbb{R} \times \mathbb{R}
                                               \rel
                                                                                                                               \mathcal{R}
                                            \text{\eg,}\text{\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
                                         \grad \xbs
                                                                                                                              \nabla x
                                           \operatorname{norm}\{a\}
                                                                                                                              ||a||
                                        \Intv{a}{b}
                                                                                                                             [a,b]
                                     \IntIntv{a}{b}
                                                                                                                            [a,b]
                                       \UpperInt{a}
                                                                                                                              \lceil a \rceil
                                       \LowerInt{a}
                                                                                                                              |a|
```