

# So You Wanna Get Good At $\text{\LaTeX}$

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  - ▶ inputenc, chngcntr, nccmath, tensor,

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  - ▶ Use if want to include figures

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- ▶ physunits
  - ▶ Nice and intuitive commands for SI units

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- ▶ `inputenc`
  - ▶ Sets the unicode version for  $\text{\LaTeX}$  but is now obsolete

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  - ▶ special functions
    - ▶ `-sin`, `-cos`, `-ldots`,  $\rightarrow \sin, \cos, \dots$
    - ▶ `-exp`, `-log`, `-ln`, `-erf`, `-ldots`  $\rightarrow \exp, \log, \ln, \operatorname{erf}, \dots$
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  - ▶ matrix macros
    - ▶ `-mqty(-imat{3})`, `-mqty(-pmat{3})`, `-mqty(-zmat{2}{2})`  
 $\rightarrow \begin{pmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 \\ 0 & 0 \end{pmatrix}$

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    - ▶ Also aligns equations via placement of `&`
    - ▶ Does *not* update equation counter
- ▶ `physunits`
  - ▶ Putting prefixes in front of units is very convenient i.e. kilometers becomes `-m[k]` to get `km` and gigayears becomes `-y[G]` to get `Gy`

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- ▶ The `-rm` command un-italicizes letters

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- ▶ Use the `-input`, `-include`, or `-import` functions