

11 Writing L^AT_EX

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1 Source code

The source code should be readable on its own, without looking at the PDF file. The following rules help to achieve this.

1.1 Macros

- Define all macros in the same place, either at the beginning of the main `tex`-file, or in a separate macro file.
- Keep only those macros that you actually use.
- Do not define two macros for the same thing.
- If you have a macro for something, always use it for that thing.
- Maintain macros neat and consistent.
- The name of a macro should be close its meaning; try to use mnemonic names. Example: for `\mathit{even}`, define

```
\newcommand{\iteven}{\mathit{even}}
```

Although it may save only few characters, using such a macro makes the the code more readable and prevents mismatching parenthesis. More examples:

```
\newcommand{\nat}{\mathbb{N}}  
\newcommand\set}[1]{\{\#1\}}
```

1.2 Comments

- Do not over-comment the source code.
- Delete comments when they become obsolete.

1.3 Lines

- The length of text lines should be between 60 and 80 characters. Keep in mind that not all editors display wrapped text.
- Start a new line for every new sentence. This makes the source text more readable and allows you to move sentences around more easily.

1.4 Spacing

- Insert empty lines wherever there is vertical space in the document.
- Indent wherever there is horizontal space in the document. Example:

```
\begin{enumerate}
  \item ...
  \item ...
  \item ...
\end{enumerate}
```

2 Figures

Whenever possible, use figure editors like Xfig, GNUplot that produce L^AT_EX output rather than ps, eps, pdf, ... This way, you get the same fonts as in the text and you can use macros consistently.

3 Layout commands

- Avoid using layout commands, such as `\` or `\newpage`.

4 Small things

- Use `~` to avoid line breaks or extra space after periods: `Section~5, Donald E.~Knuth`.
- Use `\/` to correct spacing when changing from italic to roman font:

`{\it set\/}ting` yields “*setting*”; without correction, we had “*setting*”.

- Use `\label`, `\ref` for Theorems, Sections, Figures, etc.