

Pictures in L^AT_EX

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Abstract

We describe here two ways of including pictures into L^AT_EX documents. They correspond to using a postscript file or a L^AT_EX picture environment file. Either way we can start by drawing with the software `xfig`, and exporting into the required format.

Using a Postscript file

Easier to use since wysiwyg in `xfig`. But does not allow to include math mode strings. Also, the files are usually larger.

- Use `xfig` to draw a picture and export it (preferably in landscape mode) as a postscript file (`.eps` or `.ps`)
- Include `\usepackage{epsfig}` in the preamble of your L^AT_EX file, and in the document body add the lines:

```
\begin{figure}
\begin{center}
\includegraphics{filename.eps}
\caption{this is...}
\label{...}
\end{center}
\end{figure}
```

- Scale by writing the height and/or the width of your picture:

```
\includegraphics{filename.eps}[height=5cm,width=5cm]
```

L^AT_EX picture environment

With this approach we can have equations and virtually any L^AT_EX command directly with the picture. The resulting files are small. There is the inconvenience of what you see on the screen in `xfig` is not what you get after compiling the L^AT_EX file. So, one needs to check by re-compiling every time we introduce changes to the drawing.

- Use again `xfig` to draw a picture, choose the correct magnification.
- Select the option to write text (**T**) and set the **special flag** option to **special**. Write the text as in L^AT_EX. This will not look right in `xfig` but only after compiling the L^AT_EX file.
- Export the picture as L^AT_EX picture + eepic macros (`.eepic`).
- Add `\usepackage{epic,eepic}` in the preamble. Replace the line in the instructions given for the postscript case:

```
\includegraphics{filename.eps}
```

with the command

```
\input{filename.eepic}
```

- Compile it!