Using T_EX

The T_EX family of programs are for producing typeset quality documents. This is a summary of their use.

Running T_EX

In general, producing a T_EX document involves at least three steps:

- write your document—an input file for T_EX— using an editor;

- run T_EX on it, producing a so-called DVI file;

- process the DVI file and send it to a printer.

editor $\rightarrow$ $\boxed{name.\texttt{tex}}$ $\overset{\text{T\!E\!X}}{\longrightarrow}$ $\boxed{name.\texttt{dvi}}$ $\overset{filter}{\longrightarrow}$ printer

Types of T_EX

To run:	Type:
plain T_EX	`tex` *name*`.tex`
L^AT_EX	`latex` *name*`.tex`
S_{LI}T_EX	`slitex` *name*`.tex`
$\mathcal{A}\mathcal{M}\mathcal{S}$-T_EX	`amstex` *name*`.tex`
LaTeX2e	`latex2e` *name*`.tex`

DVI Processors

To print on:	Use:
`aclps`	`dvips -Paclps` *name*`.dvi`
`aclps`,2-sided	`dvips -Pacl2ps` *name*`.dvi`
`gclps`	`dvips -Pgclps` *name*`.dvi`
`gclps`,2-sided	`dvips -Pgcl2ps` *name*`.dvi`
To preview:	Use:
In X Windows	`xdvi` *name*`.dvi`
On plain CRT	`dvi2tty` *name*`.dvi`

See the "Printing on Mathnet" page for printer names and locations, general printing tips, and how to print out only specific pages of your document.

File Naming Convention

The convention among these programs is that T_EX input file names end in `.tex`; the corresponding output file name ends in `.dvi`. In turn, the DVI processors expect file names to end in `.dvi`.

If you name your files following these conventions, you don't have to type the suffix. For example, to process `paper.tex` using plain T_EX, then print it on aclps, you can type just:

```
tex paper
dvips -Paclps paper
```

Companion Programs

These programs can help with document processing.

`bibtex` invokes B_{IB}T_EX, a bibliography processor which works with L^AT_EX. (Described in the L^AT_EX book.)

`detex` removes T_EX and L^AT_EX constructs. Useful with `spell`, for example.

`texmatch` checks for matching of braces, dollar signs, and L^AT_EX begin-end pairs.

Some L^AT_EX Style Options

`[fullpage]`	Makes all margins smaller
`[doublespace]`	"Double spaces" document
`[screen]`	Output for ASCII device
With `letter` style:	
`[ucla]`	Generates UCLA letterhead[1]
`[merge]`	Makes "form letters."

Including Graphics

Support for including graphics in T_EX documents exists in several forms, but each has its drawbacks. Some possibilities are:

- `picture` mode in L^AT_EX

- `psfig` to include P_{OST}S_{CRIPT} figures

- `sprite` for simple bitmaps

- P_ICT_EX for relatively small objects

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[1] Restricted to faculty and staff only.