INTRODUCTION TO LATEX 2ε **HOW TO GET LATEX**

Contents

1 Installing LaTeX On Your Own Computer

1.1 Linux

- All of the required packages are available within the repositories of all common distributions.
- Frontend: Kile (preferably Kile 2.0, not 2.1 beta) is most common. Gedit, kate, emacs, etc. may also be used.
- Backend: TeXLive (the full TeXLive system is usually packaged as TeXLive-Full and is somewhere around 1.2GB).
- Grad student Jason B. Hill (MATH340, jason.b.hill@colorado.edu) can assist with LaTeX and related programs installation/use on Linux systems.

1.2 Mac OS-X

- All of the required files are included in the MacTeX (re)distribution, available at

  `http://www.tug.org/mactex/`

- Frontend: TeXShop (included and installed in MacTeX)
- Backend: TeXLive (included and installed in MacTeX)
- Grad students Nathan Wakefield (MATH322, nathan.wakefield@colorado.edu) and Joshua Wiscons (MATH342, wiscons@colorado.edu) can assist with LaTeX and related programs installation/use on Mac OS-X systems.

1.3 Windows

- The frontend and backend for LaTeX in Windows must be installed separately. The basic idea is to install the backend first. (The backend is basically useless without the frontend... so don't expect it to *do* anything until you install the frontend.)

- Backend: MikTeX (see link) is most common. TeXLive is gaining in popularity. (Many of the frontends for Windows can use either distribution at this point.)

  `http://www.miktex.org/`

- Frontend: TeXNicCenter (see link) integrates easily with MikTeX, is fully featured, but may seem overwhelming at first. WinEdt and TeXWorks are other options, the first being shareware and using MikTeX, the second being freeware and using TeXLive as a backend.

  `http://www.texniccenter.org/`

- Grad students Tyson Gern (MATH366, tyson.gern@colorado.edu) and Ryan Grover (MATH237, ryan.grover@colorado.edu) can assist with LaTeX and related programs installation/use on Windows systems. Grad student Jason B. Hill (MATH340, jason.b.hill@colorado.edu) can assist with installing Linux and LaTeX.

2 Which Programs Do What??

- Backend: e.g., TeXLive (Linux, Mac OS-X), MikTeX (Windows). This is the collection of programs and scripts that take your LaTeX code and turn it into a viewable document. You rarely, if ever, directly interface with these programs. But, you do need to state which programs/scripts your LaTeX code requires, usually by including certain "packages." For example, this document includes the code

  ```
  \usepackage{amsmath,fancyhdr}
  ```

  The first of those includes the ability to write certain math equations, while the second is what allows for the header of this page to look fancy.

- Frontend: e.g., TeXShop (Mac OS-X), Kile (Linux), TeXNicCenter (Windows). This is where you write your code. You then hit a button, a keyboard shortcut, or type a command ... and your code is sent to the backend to be compiled.

- Document Viewers: To see the output of all your efforts.

  - PDF support is built-in to Mac OS-X and Linux systems. Acrobat Reader and Okular are available for Windows systems.
  - DVI support is built-in to most Linux systems (kdvi, Okular) and comes in the YAP (Yet Another Postscript Viewer) package that is buried inside the MikTeX directories on Windows systems. LaTeX is compiled by default in the DVI format, which contains extra postscript information (last revision location, etc.) to improve usability.