this is a title

pl and 0x00-pl

the date is today

Contents

1 section 0 哈哈 LaTeX

LaTeX

2 compile

2.1 MakeFile

latex hello-latex.text
dvipdfm hello-latex.dvi

2.2 sections

\section
\subsection
\subsubsection
\paragraph
\subparagraph

2.2.1 set section counter

\setcounter{section}{3}

3 contents 你好 LaTeX

first contents 你好 LaTeX
You can mix latin letters and chinese.

4 strings

this is some text of content of “this” subsection.
this is another line of content.

5 formulas

$$B^2 = \mathbf{B} \times B$$

A[3] is A_3

6 left and right

\raggedright{text on left}

\begin{flushleft}
flushleft
\end{flushleft}

\raggedleft{text on right}

\begin{flushright}
flushright
\end{flushright}

\centering{centering}

\begin{center}
center
\end{center}

7 something verbatim

```
some thing verbatim, which without escape \\ /23454234$&%^&^(*^\z@%@#$%
```

8 colors

Figure 1: title of image

9 images

Figure 2: 2 images

10 size and fount

10.1 size

tiny
footnotesize
small
normalsize
large
Large
LARGE
huge

10.2 fount

testnormal normalfont
`texttt ttfamily`
textbf bfseries
testit itshape

11 lists

- item 1
- item 2

12 turn and rotate

see the difference:
prev line
turn 30 deg

and rotate 30 deg
nextline

13 tables

13.1 tabular

this is a tabular:

3×3 matrix			ex		
11	12	13			
21	22	23	1111	1111	1111
31	32	33	34	35	36

14 vector image: gnuplot

14.1 set format

set term postscript eps enhanced color font 'Times. 24' set output 'sin.eps'

14.2 plot sin

plot sin(x)

14.3 save file

set term x11 set output

14.3.1 import

use graphicx package and includegraphics command

15 notation and referance

15.1 structure

```
\lable{marker}  % define marker
...
\ref{marker}  % ref marker
...
\pageref{marker}  % page of marker
```

we can ref the (figure:2img): 9
at page: 4

15.2 more on figure

on

```
\begin{figure}[!t]
```

the [!t] notation means force the image shows on the top of the page.
ps:
[!h] means put it here.
[!t] means put it on top.
[!b] means put it on bottom.
[!p] means put it into another page.

15.3 footnote

this is the footnote [1]

15.4 hyper link

use the package 'hyperref'
$\backslash url\{http://the.url.is.here\}$
$\backslash href\{http://there.is.another.url\}$ {the link title or some discription}

16 common errors – part 4 of the lecture

16.1 errors and warings

{} miss match: Too many }'s
letter wrong like $\backslash dtae\{Mar.2014\}$: Undifined control sequence
not in math mode: Not in Mathematics Mode.
image or box are too large: Bad Boxes!
missing packages: Missing Packages

16.2 lengths

normally don't override textlength setting or something like that.

16.3 counters

not normally used

16.4 boxes

add box on the text or $\boxed{\text{s}}$omething
use \framebox

[1] the footnote text is here

16.5 rules and struts

make some area black or something like that
using \rule command

17 mathematics and computers – part 5 of the lecture

17.1 methmatics packages and useage

\usepackage{amsmath}
\usepackage{amssymb}
\usepackage{amsthm}
inline math:
$a + a$ & $b + b$
multi line:

$$c + c$$

&

$$d + d$$

Proof. proof of something.
proof detail. □

17.2 computers heigh light

\uspackage{listings}
\uspackage{color}

\definecolor{myred}{rgb}{0.5, 0, 0}
\definecolor{mygreen}{rgb}{0, 0.5, 0}
\definecolor{myblue}{rgb}{0, 0, 0.5}

```
public class Factorial
{
  public static void main(String[] args)
  { ... }
  public static int factorial(int n)
  { ... }
}
```

18 chem and language – part 6

18.1 chem

\uspackage[version=3]{mhchem}
\uspackage{chemfig}

```
\chemfig{
  *6(=([:270]-\ce {NO2})-=([:45]-\ce {NO2})-(-)=([:135]-\ce {NO2})-)
}
```

18.2 language

```
\usepackage{qtree}
\Tree [.S
  [.NP Kurisu]
  [.VP [.V is]
    [.NP beauty]]
]
```

gb4e package for translation.
tipa package for sound notation.

19 special pages & documents – part 7

19.1 index term and reference

usepackage {makeidx}
example index
use \makeindex before \begin{document}
use \printindex at document end.
reference file use Bib file format.

19.2 letter ppt homework and pr

19.2.1 letter

change \docmentclass{ ... } to {letter}. and it will give some special command as usable.

19.2.2 ppt

use documentclass {beamer} for ppt
\begin{frame} ... \end{frame}
for each page.

19.2.3 homework

homework use documentclass {exam} with
\begin{questions}
\question Is this a question.
\begin{solution}
Yes
\end{solution}
\end{questions}

19.2.4 pr

pr using LaTeXus usful.

20 creating graphics

20.1 picture

picture tools

20.2 gnuplot

set term post eps
set output 'xxx.eps'
...
set term x11
set output