

LATEX

WARNING

Stay clear of Kile

Global settings and document layout

Text and environments

From keyboard to paper

Tables and figures

Mathematics

Global settings and document layout

```
emacs filename.tex
```

```
\documentclass[10pt,a4paper]{article}
\setlength{\textwidth}{15cm}
\setlength{\textheight}{24cm}
\addtolength{\topmargin}{-12ex}
\addtolength{\oddsidemargin}{-3.6em}
\linespread{1.0}
\begin{document}
\end{document}
```

```
\title{Title of article}
\author{Lin Yangchen\thanks{contact}}
\date{}
\maketitle
\begin{abstract}
Summary of paper
\end{abstract}
\section*{Name of section}
Text
\subsection*{Name of subsection}
Text
\pagebreak
```

Text

Default font is Roman

`\it{xyz}`

`\bf{xyz}`

`\sc{Xyz}`

\tiny
\scriptsize
\footnotesize
\small
\normalsize
\large
\Large
\LARGE
\huge
\Huge

\# \\$ ~ _ ^ % { }

Environments

```
\begin{enumerate}  
\item abcde  
\item vwxyz  
\end{enumerate}
```

```
\begin{verbatim}  
Fw;hu    cq? #@!+z  
\end{verbatim}
```

Save the tex file

`Ctrl-xS`

Create pdf file

`cd`

`pdflatex filename.tex`

View the pdf file

`acroread filename.pdf`

Tables

Figures

Mathematics

```
\begin{table}[h!]  
\begin{center}  
\begin{tabular}{l|ll}\hline  
1 & 2 & 3\\  
4 & 5 & 6\\\hline  
\end{tabular}  
\caption{Explanation of table}  
\end{center}  
\end{table}
```

```
\begin{figure}  
\begin{center}  
\includegraphics[scale=0.5]{figure.jpg}  
\caption{Explanation of figure}  
\end{center}  
\end{figure}
```

Image files must be in the
same directory as the tex file

The maths environment

`$ $`

`\[\]`

`\begin{equation} \end{equation}`

`\begin{eqnarray*} \end{eqnarray*}`

`y=mx+c`

$y = mx + c$

`\times \pm`

$\times \pm$

`\omega \Omega`

$\omega \Omega$

`100^\circ \mathrm{C}`

100°C

`\mathrm{SO}_4^{2-}`

SO_4^{2-}

`\sqrt{2}`

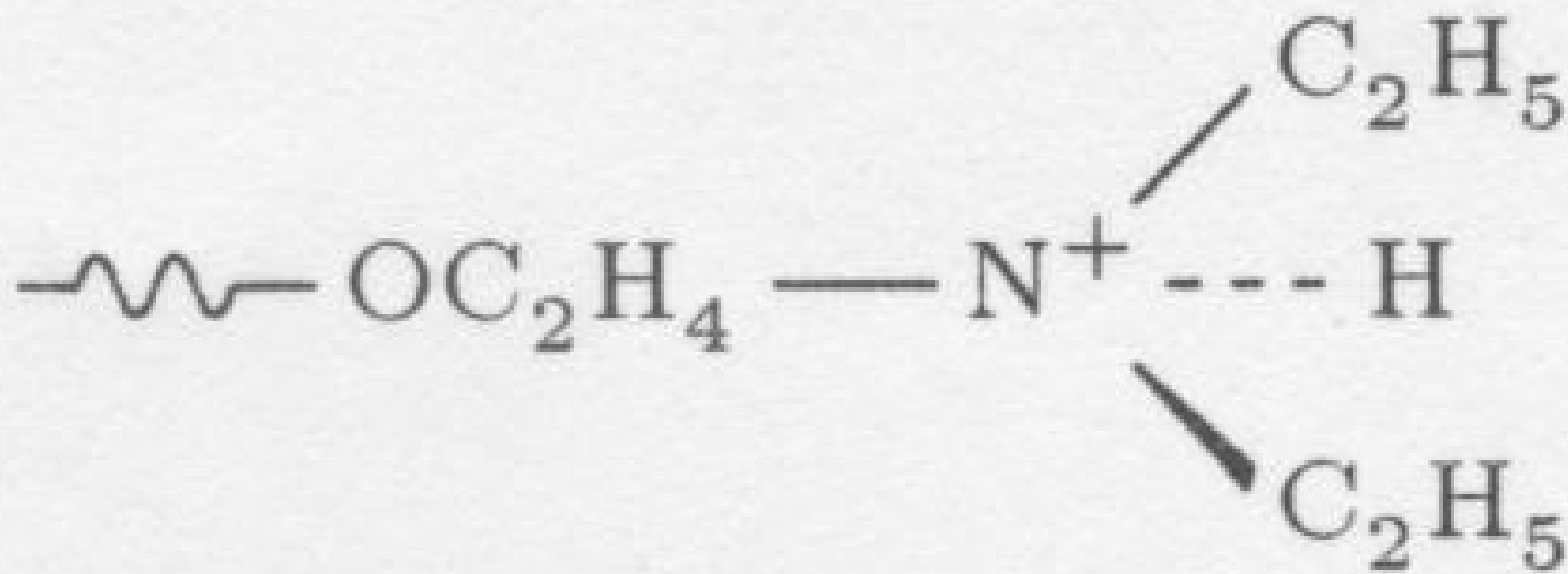
`\frac{1}{2}`

```
\begin{eqnarray*}
```

```
1+1 & = & 2\\
```

```
2 & = & 1+1
```

```
\end{eqnarray*}
```





Computer game

Write one scientific paper in LaTeX.
Include equations, tables and figures.

Deadline: end of semester.

Show to any LaTeX mentor
for comments.

Acknowledgements

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Special Programme in Science

References

1. Kopka, H. & Daly, P. W. 1999. *A Guide to LaTeX* Addison Wesley.
2. Goossens, M., Rahtz, S. & Mittelbach, F. 1997. *The LaTeX Graphics Companion* Addison Wesley.

