

Introduction to \LaTeX

A very short briefing

Henry Yip

Co-Founder

Physical Sciences Coordinator

Regional Organizer: Asia and Oceania

Head of Website Maintenance

University of Edinburgh **Mathematical Physics Y1**

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\LaTeX is a very popular and useful Language. Indeed, this very slide itself is created using \LaTeX beamer.

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- Preamble

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- Bonus Session for Texmaker Users

Preamble

- Below is an example of a **Preamble**

```
\documentclass{article}
\usepackage{amsmath}
\usepackage{amssymb}
\usepackage{parskip}
\usepackage[utf8]{inputenc}
\usepackage{titlesec}
\setcounter{secnumdepth}{4}
\titleformat{\paragraph}
{\normalfont\normalsize\bfseries}{\theparagraph}{1em}{}
\titlespacing*{\paragraph}
{0pt}{3.25ex plus 1ex minus .2ex}{1.5ex plus .2ex}
\newcommand{\ie}{\textit{i}. \textit{e}. }
\title{Introductory Astrophysics (PHYS08050) Notes}
\author{Henry Yip
s2231321@ed.ac.uk
}
```

Components

- `\documentclass{}`

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Components

- `\documentclass{}`
- `\usepackage{}`
- Title, Author, Date...
- `\begin{document}`

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- Example: `\documentclass[Option 1, Option 2]{article}`

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- `\usepackage{amsmath}` and `\usepackage{amssymb}` are almost always required.
- **Tikz** is preferred if you want to draw graphs
- Below is a beautiful example!

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- You can **always** find your answer in [Stackexchange](#)

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Preamble

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- `\usetheme{Madrid}`

Important Notice

Try not to use powerpoint slides for your Math-related presentations

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- `\usecolortheme{default}`

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- Always include `\maketitle` after `\begin{document}`

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Math Symbols

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- You can make your equations aligned also:

$$p = mv \tag{1}$$

$$E = \frac{1}{2}mv^2 \tag{2} \qquad E = \frac{p^2}{2m}$$

More on Math Symbols

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\Delta U &= \frac{dU}{dR} \Delta R \\
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- You can find more in Overleaf's website

- First, upload your images to **Overleaf**

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- Second, include this line:
 - `\includegraphics[scale= 1]{Preamble.png}`

- First include the following packages in the **Preamble**

```
\usepackage{hyperref}  
\hypersetup{  
  colorlinks=true,  
  linkcolor=blue,  
  filecolor=magenta,  
  urlcolor=cyan,  
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```
\begin{itemize}
\item Go to \href{https://www.overleaf.com/login}{the login page of Overleaf}
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- Just type down `\footnote {}`

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- The formatting is automatic

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- You can make very nice tables with \LaTeX

Time	Activity	Remarks
7:00	Train in Glasgow /Paris	
12:00	Arriving in King's Cross Station	
12:30	Check in	
13:00-14:00	Lunch	
15:00-18:45	Hong Kong Disneyland	Walk Around
19:15-20:45	Dinner	

More on Tables

```
\begin{table}[H]
\begin{center}
\begin{tabular}{c|c|c}
\textbf{Time} & \textbf{Activity}&\textbf{Remarks}\\
\hline\hline
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\hline

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- To adjust position please download `\usepackage{float}`

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- You can also click "View" in TexMaker, then "print" and then "Microsoft Print to Pdf". However, at least for me, the hyperlinks may be lost.

Approaching The End!

Questions

If you have any Questions feel free to ask me now!

Thank You!