



\LaTeX for Beginner I

GSHS \LaTeX Study

Chinook Mok

Gyeonggi Science High School
for the gifted

April 6, 2021



Outline

- 1 Why \LaTeX ?
- 2 Beginning \LaTeX
- 3 Font
- 4 Paragraph
- 5 Sections
- 6 Title
- 7 Equations
- 8 Figures
- 9 Further Subjects

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Why L^AT_EX?

- **Free:** No cost to make and to view.
- **PDF:** Its result is the pdf format, the standard document granted by ISO.
- **No mouse:** You can make a document just by typing keyboard.
- **Speed:** The more proficient, therefore, the faster.
- **Look:** Nice and boundless mathematical formulas.
- **Vector format:** Images and graphs of a vector format (e.g. eps, pdf) keep their quality.
- **Codebase:** Fast conversion between papers and presentations.
- **Unconstrained from OS:**
- **Light:** Minimized GUI. Keyboard shortcuts are replaced by commands.
- **WYSIWYM:** Just writing text. Low computer resource. No lag.
- **Automatic formation of ToC, LoF, LoT, Labels of equations, figures, and tables, ...**

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



But...

- **Unfamiliar:** In general, one uses WYSIWYG style.
- **Minimized GUI, Codebase:** Higher entry barrier for beginner.
- **Weak support for 한글**

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



But...

- **Unfamiliar:** In general, one uses WYSIWYG style.
- **Minimized GUI, Codebase:** Higher entry barrier for beginner.
- **Weak support for 한글**

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects

(Advantages of \LaTeX) – (Disadvantages of \LaTeX)



But...

- **Unfamiliar:** In general, one uses WYSIWYG style.
- **Minimized GUI, Codebase:** Higher entry barrier for beginner.
- **Weak support for 한글**

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects

(Advantages of \LaTeX) – (Disadvantages of \LaTeX)=(POSITIVE)



Outline

- 1 Why \LaTeX ?
- 2 Beginning \LaTeX
- 3 Font
- 4 Paragraph
- 5 Sections
- 6 Title
- 7 Equations
- 8 Figures
- 9 Further Subjects

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Installing \LaTeX

Install \LaTeX

- <http://latex.gs.hs.kr/>
- <https://namu.wiki/w/LaTeX>

or you can use \LaTeX online

- <https://ko.sharelatex.com/>
- <https://www.overleaf.com/>

Hereafter this manual is written for the \LaTeX installed in your pc.

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Make '*.tex' File

Make a text file of the extension 'tex'

```
\documentclass[11pt]{article}
```

Preamble

```
\begin{document}
```

Body

```
\end{document}
```

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Make ‘*.tex’ File

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects

In the body,

```
She's gone  
Out of my life
```

then you have

She's gone Out of my life

In the body,

```
She's gone  
Out of my life
```

you have

She's gone
Out of my life

In the body,

```
She's gone\par  
Out of my life
```

you get

She's gone
Out of my life



Outline

- 1 Why \LaTeX ?
- 2 Beginning \LaTeX
- 3 Font**
- 4 Paragraph
- 5 Sections
- 6 Title
- 7 Equations
- 8 Figures
- 9 Further Subjects

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Font Size

<code>\tiny{ABCD}</code>	ABCD
<code>\scriptsize{ABCD}</code>	ABCD
<code>\footnotesize{ABCD}</code>	ABCD
<code>\small{ABCD}</code>	ABCD
<code>\normalsize{ABCD}</code>	ABCD
<code>\large{ABCD}</code>	ABCD
<code>\Large{ABCD}</code>	ABCD
<code>\LARGE{ABCD}</code>	ABCD
<code>\huge{ABCD}</code>	ABCD
<code>\Huge{ABCD}</code>	ABCD

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Font Families

Family

- roman `\textrm{roman}`
- sans serif `\textsf{sans serif}`
- typewriter `\texttt{typewriter}`

Series

- medium `\textmd{medium}`
- **boldface** `\textbf{boldface}`

Shape

- upright `\textup{upright}`
- *italic* `\textit{italic}`
- *slanted* `\textsl{slanted}`
- SMALL CAP `\textsc{small cap}`

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Times New Roman

If you want to use 'times new roman' font, write the following in the preamble

```
\usepackage{mathptmx}  
\usepackage[T1]{fontenc}  
\usepackage[utf8]{inputenc}
```

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Outline

- 1 Why \LaTeX ?
- 2 Beginning \LaTeX
- 3 Font
- 4 Paragraph**
- 5 Sections
- 6 Title
- 7 Equations
- 8 Figures
- 9 Further Subjects

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Alignment

In the body

```
\begin{center}  
\LARGE\textbf{Why \LaTeX?}  
\par\vspace{1em}  
\large\textsf{GSHS \LaTeX\ Workshop 2018}  
\end{center}
```

The default style of paragraph alignment is fully-justified paragraph. Copy and paste the previous sentence ten times here in order to make this paragraph longer.

```
\begin{flushleft}  
The 'flushleft' environment makes the paragraph the left-justified text.  
Again, copy and paste the previous sentence ten times here, to make this  
paragraph longer.  
\end{flushleft}  
\begin{flushright}  
\textit{Chinook Mok}  
\end{flushright}
```

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Alignment

you get

Why L^AT_EX?

GSHS L^AT_EX Workshop 2018

The default style of paragraph alignment is fully-justified paragraph. Copy and paste the previous sentence ten times here in order to make this paragraph longer.

The ‘flushleft’ environment makes the paragraph the left-justified text. Again, copy and paste the previous sentence ten times here, to make this paragraph longer.

Chinook Mok

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Outline

- 1 Why \LaTeX ?
- 2 Beginning \LaTeX
- 3 Font
- 4 Paragraph
- 5 Sections**
- 6 Title
- 7 Equations
- 8 Figures
- 9 Further Subjects

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Sections

In the body,

```
\section{She's Gone}
```

She's gone out of my life. I was wrong, I'm to blame, I was so untrue, I can't live without her love. In my life there's just an empty space. All my dreams are lost. I'm wasting away. Forgive me, girl. Lady, won't you save me? My heart belongs to you. Lady, can you forgive me? For all I've done to you. Lady, oh, lady.

```
\section{Bohemian Rhapsody}
```

Is this the real life? Is this just fantasy? Caught in a landslide. No escape from reality. Open your eyes. Look up to the skies and see. I'm just a poor boy, I need no sympathy. Because I'm easy come, easy go, a little high, little low. Anyway the wind blows, doesn't really matters to me, to me .

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Sections

you get

1 She's Gone

She's gone out of my life. I was wrong, I'm to blame, I was so untrue, I can't live without her love. In my life there's just an empty space. All my dreams are lost. I'm wasting away. Forgive me, girl. Lady, won't you save me? My heart belongs to you. Lady, can you forgive me? For all I've done to you. Lady, oh, lady.

2 Bohemian Rhapsody

Is this the real life? Is this just fantasy? Caught in a landslide. No escape from reality. Open your eyes. Look up to the skies and see. I'm just a poor boy, I need no sympathy. Because I'm easy come, easy go, a little high, little low. Anyway the wind blows, doesn't really matters to me, to me.

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Subsections

In the body,

```
\section{She's Gone}
```

She's gone out of my life. I was wrong, I'm to blame, I was so untrue, I can't live without her love. In my life there's just an empty space. All my dreams are lost. I'm wasting away. Forgive me, girl. Lady, won't you save me? My heart belongs to you. Lady, can you forgive me? For all I've done to you. Lady, oh, lady.

```
\subsection{Bohemian Rhapsody}
```

Is this the real life? Is this just fantasy? Caught in a landslide. No escape from reality. Open your eyes. Look up to the skies and see. I'm just a poor boy, I need no sympathy. Because I'm easy come, easy go, a little high, little low. Anyway the wind blows, doesn't really matters to me, to me .

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Subsections

you get

1 She's Gone

She's gone out of my life. I was wrong, I'm to blame, I was so untrue, I can't live without her love. In my life there's just an empty space. All my dreams are lost. I'm wasting away. Forgive me, girl. Lady, won't you save me? My heart belongs to you. Lady, can you forgive me? For all I've done to you. Lady, oh, lady.

1.1 Bohemian Rhapsody

Is this the real life? Is this just fantasy? Caught in a landslide. No escape from reality. Open your eyes. Look up to the skies and see. I'm just a poor boy, I need no sympathy. Because I'm easy come, easy go, a little high, little low. Anyway the wind blows, doesn't really matters to me, to me.

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Section—Modification

In the preamble,

```
\usepackage{secdot}  
\sectiondot{subsection}
```

then you get

1. She's Gone

She's gone out of my life. I was wrong. I'm to blame, I was so untrue, I can't live without her love. In my life there's just an empty space. All my dreams are lost. I'm wasting away. Forgive me, girl. Lady, won't you save me? My heart belongs to you. Lady, can you forgive me? For all I've done to you. Lady, oh, lady.

1.1. Bohemian Rhapsody

Is this the real life? Is this just fantasy? Caught in a landslide. No escape from reality. Open your eyes. Look up to the skies and see. I'm just a poor boy, I need no sympathy. Because I'm easy come, easy go, a little high, little low. Anyway the wind blows, doesn't really matter to me, to me.

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Section—Modification

In the preamble,

```
\renewcommand{\thesection}{\Roman{section}}  
\renewcommand{\thesubsection}{\thesection.\roman{subsection}}
```

then you get

I. She's Gone

She's gone out of my life. I was wrong, I'm to blame, I was so untrue, I can't live without her love. In my life there's just an empty space. All my dreams are lost. I'm wasting away. Forgive me, girl. Lady, won't you save me? My heart belongs to you. Lady, can you forgive me? For all I've done to you. Lady, oh, lady.

I.i. Bohemian Rhapsody

Is this the real life? Is this just fantasy? Caught in a landslide. No escape from reality. Open your eyes. Look up to the skies and see. I'm just a poor boy, I need no sympathy. Because I'm easy come, easy go, a little high, little low. Anyway the wind blows, doesn't really matters to me, to me.

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Section—Reference

In the body,

```
\section{She's Gone}\label{sec:shes_gone}
```

She's gone out of my life. I was wrong, I'm to blame, I was so untrue, I can't live without her love. In my life there's just an empty space. All my dreams are lost. I'm wasting away. Forgive me, girl. Lady, won't you save me? My heart belongs to you. Lady, can you forgive me? For all I've done to you. Lady, oh, lady. In the section \ref{sec:bohemian} we'll meet '\emph{Queen}'!

```
\section{Bohemian Rhapsody}\label{sec:bohemian}
```

Is this the real life? Is this just fantasy? Caught in a landslide. No escape from reality. Open your eyes. Look up to the skies and see. I'm just a poor boy, I need no sympathy. Because I'm easy come, easy go, a little high, little low. Anyway the wind blows, doesn't really matters to me, to me. In the section \ref{sec:shes_gone}, we had met '\emph{Steel Heart}'!

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Section—Reference

then you get

1. She's Gone

She's gone out of my life. I was wrong, I'm to blame, I was so untrue, I can't live without her love. In my life there's just an empty space. All my dreams are lost. I'm wasting away. Forgive me, girl. Lady, won't you save me? My heart belongs to you. Lady, can you forgive me? For all I've done to you. Lady, oh, lady. In the section 2 we'll meet '*Queen*'!

2. Bohemian Rhapsody

Is this the real life? Is this just fantasy? Caught in a landslide. No escape from reality. Open your eyes. Look up to the skies and see. I'm just a poor boy, I need no sympathy. Because I'm easy come, easy go, a little high, little low. Anyway the wind blows, doesn't really matter to me, to me. In the section 1, we had met '*Steel Heart*'!

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Outline

- 1 Why \LaTeX ?
- 2 Beginning \LaTeX
- 3 Font
- 4 Paragraph
- 5 Sections
- 6 Title**
- 7 Equations
- 8 Figures
- 9 Further Subjects

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Title

In the preamble,

```
\title{\textbf{Let's Sing!}}  
\author{Chinook Mok}  
\date{\small\today}
```

In the body,

```
\maketitle
```

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Title

you get

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects

Let's Sing!

Chinook Mok

March 22, 2018

1. She's Gone

She's gone out of my life. I was wrong, I'm to blame, I was so untrue, I can't live without her love. In my life there's just an empty space. All my dreams are lost. I'm wasting away. Forgive me, girl. Lady, won't you save me? My heart belongs to you. Lady, can you forgive me? For all I've done to you. Lady, oh, lady. In the section 2 we'll meet '*Queen*'!

2. Bohemian Rhapsody

Is this the real life? Is this just fantasy? Caught in a landslide. No escape from reality. Open your eyes. Look up to the skies and see. I'm just a poor boy, I need



Title—Affiliation

In the preamble,

```
\usepackage{authblk}

\title{\textbf{Let's Sing!}}
\author{Chinook Mok}
\affil{GSHS}
\author{Sowon}
\author{Yerin}
\author{Yuju}
\affil{GFRIEND}
\date{\small\today}
```

In the body,

```
\maketitle
```

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Title—Affiliation

you get

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects

Let's Sing!

Chinook Mok

GSHS

Sowon, Yerin, and Yuju

GFRIEND

March 22, 2018

1. She's Gone

She's gone out of my life. I was wrong, I'm to blame, I was so untrue, I can't live without her love. In my life there's just an empty space. All my dreams are lost. I'm wasting away. Forgive me, girl. Lady, won't you save me? My heart belongs



Outline

- 1 Why \LaTeX ?
- 2 Beginning \LaTeX
- 3 Font
- 4 Paragraph
- 5 Sections
- 6 Title
- 7 Equations**
- 8 Figures
- 9 Further Subjects

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Equations—Single line

In the preamble,

```
\usepackage{amsmath}
```

In the body,

```
Two objects of mass  $m_1$  and  $m_2$  are located at  $\mathbf{r}_1$  and  $\mathbf{r}_2$ , respectively. The force exerted on the body of  $m_1$  due to that of  $m_2$  is given by
```

$$\mathbf{F}_{12} = -G \frac{m_1 m_2}{r^2} \hat{\mathbf{r}}_{12}.$$

where $G \approx (20/3) \times 10^{-11} \text{ m}^3 \text{ kg}^{-1} \text{ s}^{-2}$ is the universal gravitational constant, $\mathbf{r} = |\mathbf{r}_1 - \mathbf{r}_2|$ is the distance from m_2 to m_1 , and $\hat{\mathbf{r}}_{12}$ is the unit vector of $\mathbf{r}_{12} \equiv \mathbf{r}_1 - \mathbf{r}_2$.

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Equations—Single line

you get

Two objects of mass m_1 and m_2 are located at \mathbf{r}_1 and \mathbf{r}_2 , respectively. The force exerted on the body of m_1 due to that of m_2 is given by

$$\mathbf{F}_{12} = -G \frac{m_1 m_2}{r^2} \hat{\mathbf{r}}_{12}. \quad (1)$$

where $G \approx (20/3) \times 10^{-11} \text{ m}^3 \text{ kg}^{-1} \text{ s}^{-2}$ is the universal gravitational constant, $r = |\mathbf{r}_1 - \mathbf{r}_2|$ is the distance from m_2 to m_1 , and $\hat{\mathbf{r}}_{12}$ is the unit vector of $\mathbf{r}_{12} \equiv \mathbf{r}_1 - \mathbf{r}_2$.

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Equations—Multi lines

In the body,

```
\begin{equation}
\begin{split}
\frac{d\omega_b^2}{dt} &= (\gamma_L - \gamma_d) \omega_b^2 - \frac{\gamma_L}{2} \int_{t/2}^t dt_1 \int_{t-t_1}^{t_1} dt_2 (t-t_1)^2 \\
&\quad \times e^{-\nu_a(2t-t_1-t_2)} \omega_b^2(t_1) \omega_b^2(t_2) \omega_b^2(t+t_2-t_1).
\end{split}
\end{equation}
\end{split}
\label{eq:BBmodel}
\end{equation}
```

we get

$$\frac{d\omega_b^2}{dt} = (\gamma_L - \gamma_d) \omega_b^2 - \frac{\gamma_L}{2} \int_{t/2}^t dt_1 \int_{t-t_1}^{t_1} dt_2 (t-t_1)^2 e^{-\nu_a(2t-t_1-t_2)} \omega_b^2(t_1) \omega_b^2(t_2) \omega_b^2(t+t_2-t_1). \quad (1)$$

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Equations—Multi lines

In the body,

```
\begin{align}
\oint_S \mathbf{E} \cdot d\mathbf{A} &= \int_V \frac{\rho}{\epsilon_0} \mathrm{d}V \quad \text{\label{eq:Gauss}} \\
\oint_S \mathbf{B} \cdot d\mathbf{A} &= 0 \quad \text{\label{eq:No_Monopole_B}} \\
\oint_C \mathbf{E} \cdot d\mathbf{l} &= -\frac{\partial}{\partial t} \int_S \mathbf{B} \cdot d\mathbf{A} \quad \text{\label{eq:Faraday}} \\
\oint_C \mathbf{B} \cdot d\mathbf{l} &= \mu_0 \int_S \mathbf{J} \cdot d\mathbf{A} + \mu_0 \epsilon_0 \frac{\partial}{\partial t} \int_S \mathbf{E} \cdot d\mathbf{A} \quad \text{\label{eq:Ampere}}
\end{align}
```

we get

$$\oint_S \mathbf{E} \cdot d\mathbf{A} = \int_V \frac{\rho}{\epsilon_0} dV \quad (1)$$

$$\oint_S \mathbf{B} \cdot d\mathbf{A} = 0 \quad (2)$$

$$\oint_C \mathbf{E} \cdot d\mathbf{l} = -\frac{\partial}{\partial t} \int_S \mathbf{B} \cdot d\mathbf{A} \quad (3)$$

$$\oint_C \mathbf{B} \cdot d\mathbf{l} = \mu_0 \int_S \mathbf{J} \cdot d\mathbf{A} + \mu_0 \epsilon_0 \frac{\partial}{\partial t} \int_S \mathbf{E} \cdot d\mathbf{A} \quad (4)$$

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Equations—Reference

In the body,

```
\begin{equation}  
\mathbf{F} = -G\frac{m_1 m_2}{r^2}\hat{\mathbf{r}}.\label{eq:grav_force}  
\end{equation}  
Dividing both sides of \eqref{eq:grav_force} by $m_1$ we obtain the  
gravitational field due to $m_2$.
```

we get

$$\mathbf{F} = -G\frac{m_1 m_2}{r^2}\hat{\mathbf{r}}. \quad (1)$$

Dividing both sides of (1) by m_1 we obtain the gravitational field due to m_2 .

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Outline

- 1 Why \LaTeX ?
- 2 Beginning \LaTeX
- 3 Font
- 4 Paragraph
- 5 Sections
- 6 Title
- 7 Equations
- 8 Figures**
- 9 Further Subjects

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

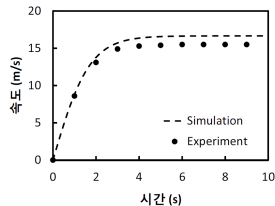
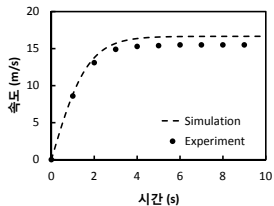
Equations

Figures

Further
Subjects



Vector Image and Raster Image



● PDF

● PS

● EPS

● PNG

● JPEG

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Import an Image File

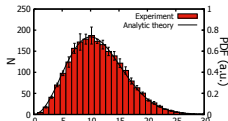
You should have a figure file above all. If the path of the figure file is, e.g., './figures/graph.pdf', write following in the preamble,

```
\usepackage{graphicx}
```

and in the body,

```
\includegraphics[width=0.5\textwidth]{./figures/graph.pdf}
```

we get



Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Figure Environment

In the body,

```
\begin{figure}[t]
\centering
\includegraphics[width=0.5\textwidth]{./figures/graph.pdf}
\caption{Number of beads in every tubes spaced at regular intervals.}
\label{fig:result01}
\end{figure}
```

we get

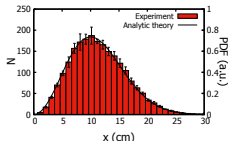


Figure 1: Number of beads in every tubes spaced at regular intervals.

Why \LaTeX ?

Beginning
 \LaTeX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



Figure Environment

The option of the figure environment specifies the placement.

- **h** Place the float *here*.
- **t** Position at the *top* of the page.
- **b** Position at the *bottom* of the page.
- **p** Put on a special *page* for floats only.

```
\usepackage[labelsep=period,labelfont=bf]{caption}
```

makes Figure 1: → **Figure 1.**

```
\renewcommand{\figurename}{Fig}
```

makes **Fig 1.**

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects



In the next time ...

- Table
- Itemization
- Citation
- Header and Footer
- Document Class
- Beamer

Expert

- **TikZ**
 - Basic: 2D drawing
 - sub-packages: circuitikz, tikz-3dplot

Why L^AT_EX?

Beginning
L^AT_EX

Font

Paragraph

Sections

Title

Equations

Figures

Further
Subjects