# Monash Beamer Theme Thesis Proposal Presentation

#### Runze Ma

Faculty of Information Technology Monash University

October 2025





- 1 Background
- 2 Related Work
- Research Content
- 4 Project Timeline
- 6 References

Background

- 2 Related Work
- 3 Research Content
- 4 Project Timeline
- 6 References

# Why Beamer?

Background

• LATEX is widely used in academia, and many universities have their own Beamer themes.

### Why Beamer?

Background

- LATEX is widely used in academia, and many universities have their own Beamer themes.
- Please use XelATFX compiler for best results.



## Why Beamer?

Background

- LATEX is widely used in academia, and many universities have their own Beamer themes.
- Please use XelaTeX compiler for best results.
- Original theme: https://github.com/Kha1edze/MONASH-Beamer-Theme



- 2 Related Work
  Beamer Theme Categorie
- 3 Research Content
- Project Timeline
- 6 References



- 1 Background
- 2 Related Work Beamer Theme Categories
- 3 Research Content
- 4 Project Timeline
- 6 References

# Beamer Theme Types

- Default LATEX themes
- University-customized themes
- This template was modified from the Tsinghua University Beamer theme.



- Background
- 2 Related Work
- 3 Research Content Theme Enhancements Why Use Beamer
- 4 Project Timeline
- 6 References



- Background
- 2 Related Work
- Research Content Theme Enhancements Why Use Beamer
- 4 Project Timeline
- 6 References

#### Differences from THU Beamer Theme

- Color scheme adjustments
- University logo



- Background
- 2 Related Work
- Research Content Theme Enhancements Why Use Beamer
- 4 Project Timeline
- 6 References

## Why Beamer

• LATEX is widely adopted in scientific publishing.

Microsoft Word	<b>Ŀ</b> T <b>E</b> X
Word processor	Professional typesetting
Easy to learn	Requires basic syntax
WYSIWYG	What you mean is what you get
Formatting is time-consuming	Focus on content
Poor formula layout	Excellent for equations
Proprietary format	Plain text, stable, portable
License required	Free and open source

### Equations Example

### Unnumbered Equation

$$J( heta) = \mathbb{E}_{\pi_{ heta}}[G_t] = \sum_{s \in \mathcal{S}} d^\pi(s) V^\pi(s) = \sum_{s \in \mathcal{S}} d^\pi(s) \sum_{a \in \mathcal{A}} \pi_{ heta}(a|s) Q^\pi(s,a)$$

#### Multiline Equation

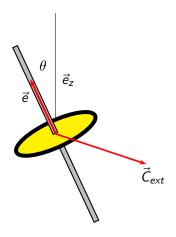
$$Q_{\text{target}} = r + \gamma Q^{\pi}(s', \pi_{\theta}(s') + \epsilon)$$

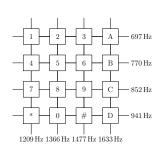
$$\epsilon \sim \text{clip}(\mathcal{N}(0, \sigma), -c, c)$$
(1)



13 / 23

Runze Ma





# PTEX Common Commands

#### Commands

ackslashchapter	ackslashsection	$\setminus$ subsection	\paragraph
chapter	section	sub-section	paragraph
\centering	$\backslash \mathtt{emph}$	\verb	\url
center	emphasize	original	hyperlink
N -	١	1	\ ·
ackslashfootnote	ackslashitem	$ackslash  ext{caption}$	ackslashincludegraphics
\footnote footnote	\item list item	\caption caption	insert image
<b>\</b>	<b>\</b>	· -	\

#### **Environment**

table table	figure figure	equation formula
itemize	enumerate	description
non-numbering item	numbering item	description



```
\begin{itemize}
  \item A \item B
  \item C
  \begin{itemize}
    \item C-1
  \end{itemize}
\end{itemize}
```

- C-1

## LATEX Examples of environmental commands

```
\begin{itemize}
    \item A \item B
    \item C
    \begin{itemize}
       \item C-1
6
    \end{itemize}
  \end{itemize}
```

```
\begin{enumerate}
 \item A \item B
  \item C
  \begin{itemize}
    \item[n+e]
  \end{itemize}
\end{enumerate}
```

```
• C-1
```

```
n+e
```

A

```
1  $V = \frac{4}{3}\pi r^3$
2
3  \[
4   V = \frac{4}{3}\pi r^3
5  \]
6
7  \begin{equation}
   \label{eq:vsphere}
   V = \frac{4}{3}\pi r^3
10 \end{equation}
```

$$V = \frac{4}{3}\pi r^3$$

$$V = \frac{4}{3}\pi r^3$$

$$V = \frac{4}{3}\pi r^3$$
(2)

```
\begin{table}[htbp]
  \caption{numbers & meaning}
  \label{tab:number}
  \centering
  \begin{tabular}{cl}
    \toprule
    number & meaning \\
    \midrule
    1 & 4.0 \\
    2 & 3.7 \\
    \bottomrule
  \end{tabular}
\end{table}
```

Table 1: numbers & meaning

numbers	meaning
1	4.0
2	3.7

formula (2) at previous slide and Table 1

- 1 Background
- 2 Related Work
- 3 Research Content
- 4 Project Timeline
- **5** References

- January: Literature review
- February: Reproduce and evaluate Beamer themes
- March to April: Beautify Monash Beamer theme
- May: Thesis writing



- 1 Background
- 2 Related Work
- 3 Research Content
- 4 Project Timeline
- **5** References

Runze Ma

Thanks!