

Title of Presentation

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Outline

- 1 Section 1
 - Sub a
 - Sub b
- 2 Section 2
- 3 Section 3
- 4 Tutorial

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My first frame

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

My second frame

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

My third frame

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

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My fourth frame

Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetur adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

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My fifth frame

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consetetuer.

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Lists

It is use to present your content in simple list form. First a bulleted list where we use *itemize* environment -

- Each bullet begins with command *item*
- When we talk about themes later we can change the style of bullet

The other type of environment is *enumerate* for numbered lists -

- ① The default is numbers, you can change them with an optional argument
 - i Nest 1
 - ii Nest 2
- ② Above is a nested list

You can use *vfill* command to separate parts of your slide

Description Lists

Another nice list style is *description*. Great for nomenclature -

```
\begin{description}
  \item[BWR] Boiling Water Reactor
  \item[PWR] Pressurized Water Reactor
  \item[ATWS] Anticipated Transient Without Scram
  \item[LOCA] Loss of Coolant Accident
\end{description}
```

BWR Boiling Water Reactor

PWR Pressurized Water Reactor

ATWS Anticipated Transient Without Scram

LOCA Loss of Coolant Accident

Table of Contents

- To add a table of contents, make a frame and put `\tableofcontents` as the content. Because we are using the `verbatim` environment in Beamer we need the optional argument *fragile* after the `begin` frame.

If you want the outline to appear every time there is a new section put the following -

```
\AtBeginSection[]  
{  
  \begin{frame}<beamer>  
    \frametitle{Outline}  
    \tableofcontents[currentsection]  
  \end{frame}  
}
```

You can put this in the preamble.

PDF Navigation Options

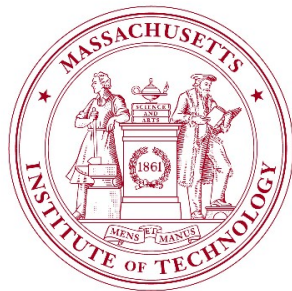
- If you open the PDF in Adobe, you can play around with the nav. buttons in the bottom right corner.
- If you want to remove them just put the following in the preamble -

```
\setbeamertemplate{navigation symbols}{} 
```

Having Columns

Columns are a great way to layout your slides. Just use the *columns* environment.

- This is item 1
- This is item 2
- This is item 3



Blocks I

General Block - *block*

Lorem ipsum dolor sit amet, aequae labitur an sed, nulla ceteros et qui. No sit iriure quaeque, duo suas vitae cu, eu error mediocrem signiferumque nam. Est ne mutat placerat. Sit partem appetere te. Vel ne reque latine iuaret, has an prompta dignissim, cum summo indoctum adolescens ex.

Alert Block - *alertblock*

Lorem ipsum dolor sit amet, aequae labitur an sed, nulla ceteros et qui. No sit iriure quaeque, duo suas vitae cu, eu error mediocrem signiferumque nam. Est ne mutat placerat. Sit partem appetere te. Vel ne reque latine iuaret, has an prompta dignissim, cum summo indoctum adolescens ex.

Blocks II

Definition

Lorem ipsum dolor sit amet, aequalebitur an sed, nulla ceteros et qui. No sit iriure quaeque, duo suas vitae cu, eu error mediocrem signiferumque nam. Est ne mutat placerat. Sit partem appetere te. Vel ne reque latine iuaret, has an prompta dignissim, cum summo indoctum adolescens ex.

Example

Lorem ipsum dolor sit amet, aequalebitur an sed, nulla ceteros et qui. No sit iriure quaeque, duo suas vitae cu, eu error mediocrem signiferumque nam. Est ne mutat placerat. Sit partem appetere te. Vel ne reque latine iuaret, has an prompta dignissim, cum summo indoctum adolescens ex.

Blocks III

Theorem

Lorem ipsum dolor sit amet, aequae labitur an sed, nulla ceteros et qui. No sit iriure quaeque, duo suas vitae cu, eu error mediocrem signiferumque nam. Est ne mutat placerat. Sit partem appetere te. Vel ne reque latine iuvaret, has an prompta dignissim, cum summo indoctum adolescens ex.

Corollary

Lorem ipsum dolor sit amet, aequae labitur an sed, nulla ceteros et qui. No sit iriure quaeque, duo suas vitae cu, eu error mediocrem signiferumque nam. Est ne mutat placerat. Sit partem appetere te. Vel ne reque latine iuvaret, has an prompta dignissim, cum summo indoctum adolescens ex.

Proof.

Lorem ipsum dolor sit amet, aequae labitur an sed, nulla ceteros et qui. No sit iriure quaeque, duo suas vitae cu, eu error mediocrem signiferumque nam. Est ne mutat placerat. Sit partem appetere te. Vel ne reque latine iuvaret, has an prompta dignissim, cum summo indoctum adolescens ex.



Algorithm Environment

- Use package `algorithmic` to give you basic environment
- Use package `algorithm` to give you the floating wrapper with a caption

Algorithm 1 Algorithm Example

```
1: Use \STATE for a simple statement
2: if some condition is true then
3:   do some processing
4: else if some other condition is true then
5:   do some different processing
6: else
7:   do the default actions
8: end if
9: for  $i = 0$  to 10 do
10:  print  $i$ 
11: end for
```

Code Listings

- Use *listings* package, there are a ton of options, just read pdf!

```
program main
  implicit none
  integer :: i

  ! Begin printing loop
  do i = 1, 4
    print *, 'Number:', i
  end do
end program main
```

Hyperlinking

- Put a *label* where the hyperlink target is
- Use *hyperlink* command as follows:

```
\hyperlink{label}{text}
```

[Click here](#) to go to columns slide.

- We can also add beamer buttons with the *beamerbutton* command

```
\hyperlink{label}{\beamerbutton{text}}
```

[Click here](#) to go to columns slide.

Pause Command

To show bullets one at a time you can use the *pause* command -

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Pause Command

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- This brings out the difference between frame and slides
- Here we have 1 frame made up of multiple slides
- Notice that the frame number doesn't change
- Beamer has a much more sophisticated system for this

Overlay Specifications - List Structure

- We add $\langle \rangle$ to do item specifications

Overlay Specifications - List Structure

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- The number is the slide number the item should show up on

Overlay Specifications - List Structure

- We add < > to do item specifications
- The number is the slide number the item should show up on
- If you put a - sign after the number it will include it for all subsequent slides

Overlay Specifications - List Structure

- We add $\langle \rangle$ to do item specifications
- The number is the slide number the item should show up on
- If you put a - sign after the number it will include it for all subsequent slides
- Last item

Overlay Specification - Onslide command

First Line of Text

Text is covered until the slide number.

Overlay Specification - Onslide command

First Line of Text

Second Line of Text

Text is covered until the slide number.

Overlay Specification - Onslide command

First Line of Text

Second Line of Text

Third Line of Text

Text is covered until the slide number.

Overlay Specification - Uncover command

First Line of Text

Second Line of Text

Third Line of Text

Text is covered until the slide number just like *onslide*. However, you can make the text transparent by adding the following at the top of the slide—

```
\setbeamercovered{transparent}
```

Overlay Specification - Uncover command

First Line of Text

Second Line of Text

Third Line of Text

Text is covered until the slide number just like *onslide*. However, you can make the text transparent by adding the following at the top of the slide—

```
\setbeamercovered{transparent}
```

Overlay Specification - Uncover command

First Line of Text

Second Line of Text

Third Line of Text

Text is covered until the slide number just like *onslide*. However, you can make the text transparent by adding the following at the top of the slide—

```
\setbeamercovered{transparent}
```

Overlay Specification - Visible/Invisible command

First Line of Text

Invisible Line 4

Overlay Specification - Visible/Invisible command

First Line of Text

Second Line of Text

Invisible Line 4

Overlay Specification - Visible/Invisible command

First Line of Text
Second Line of Text
Third Line of Text
Invisible Line 4

Overlay Specification - Visible/Invisible command

First Line of Text
Second Line of Text
Third Line of Text

Overlay Specification - Only command

First Line of Text

Does not preserve the white space for invisible content

Overlay Specification - Only command

First Line of Text

Second Line of Text

Does not preserve the white space for invisible content

Overlay Specification - Only command

First Line of Text

Second Line of Text

Third Line of Text

Does not preserve the white space for invisible content

Overlay Specification - Only/Visible comparison

First Line of Text

First Line of Text

Overlay Specification - Only/Visible comparison

Second Line of Text

Second Line of Text

Overlay Specification - Only/Visible comparison

Third Line of Text

Third Line of Text

Beamer Themes

<http://www.hartwork.org/beamer-theme-matrix/>

`usetheme` Layout of content on frames

`usecolortheme` Color style of frames

`useinnertheme` Style of shapes around item bullets

`useoutertheme` Style of section/subsection header/footer

`usefonttheme` Style of font

Using the `outertheme` can negate the `use theme` command and give you a completely different look to your slides

Making Handouts

- put *handout* as an optional argument after documentclass
- you can then use package *pgfpages* to put 2 or 4 on a page and make it landscape

```
\pgfpagesuselayout{4 on 1}[a4paper, border shrink=5mm,  
landscape]
```

Slide Transitions

- See Ch. 14 of Beamer User Guide
- There are many different types of slide transitions
- Just Put them at the beginning of a frame

Animations

- Use the `animate` package
- See documentation for options
- I use `animategraphics` command

Embedding Movies I

- Only works in Windows or Mac
- Need Latex 3 kernels/packages
- Movie package is called media9

I have all the Latex 3 files for you in a zip folder

- All you need to do is use the media9 package

```
\includemedia[  
width=0.4\linewidth,  
height=0.3\linewidth,  
activate=pageopen,  
addresource=yourmoviefilename,  
flashvars={source=yourmoviefilename}  
]{}{VPlayer.swf}
```

Embedding Movies II

