

# IRTES

sciences & ingénierie

Institut de Recherche sur les Transports, l'Énergie et la Société

UNIVERSITÉ DE TECHNOLOGIE DE BELFORT-MONTBELIARD

## Documentation of the IRTES Theme for Beamer

Macros provided by the theme

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# Outline

1 Introduction

2 Additional Macros

# Introduction

- This document explain the  $\text{\LaTeX}$  macros that are provided by the IRTES theme for beamer.
- To use the IRTES theme for beamer, you must:
  - 1 Install the files of the IRTES theme inside your  $\text{\LaTeX}$  distribution.
  - 2 Create a document, which uses the document class:  
`irtesbeamer`

## Major Features

- Apply the official style for the IRTES institute.
- Add a title slide (with label `titleslide` for `\hyperlink`) as the first slide.
- Add a final slide at the end of the presentation to avoid “black” screen at the end of the presentation.

## Class Options (1/2)

The document class `irtesbeamer` supports the following options:

- `english`: the slides are written in English (this is the default).
- `french`: the slides are written in French.
- `nocover`: do not add a slide for the title and the “thanks”.
- `thanksslide`: add a slide with the word “Thanks” at the end (this is the default).
- `questionslide`: add a slide with the word “Question” at the end.
- `repeattitleslide`: add the title slide at the end.
- `textnumberstyle`: the frame numbers are output as text. [▶ See example](#)
- `circlenumberstyle`: the frame numbers are output in a circle. [▶ See example](#)
- `sectioncirclenumberstyle`: the frame numbers are output in a circle. [▶ See example](#)

## Class Options (2/2)

- `partcirclednumberstyle`: similar to `circlednumberstyle` except that the indicator is reset at the start of each part.
- `partsectioncirclednumberstyle`: similar to `sectioncirclednumberstyle` except that the indicator is reset at the start of each part.
- `eventintitlebar`: on the title slide, the event's name should be put in the title bar.
- `eventbelowauthors`: on the title slide, the event's name should be put below the authors.
- All the options accepted by Beamer.

# Title and Subtitle

## Title

Use the macro: `\title{title of the document}`

## Subtitle

Use the macro: `\subtitle{subtitle of the document}`

## Authors

- Authors are defined with the macro:  
`\author[short]{long}`
  - the long list of authors is displayed on the front page. You should separate the names with the macro `\and`.
  - the short list of authors is displayed inside the foot line of the slides. You **must not separate** the names with the macro `\and`.
- Alternatively, you could define the authors with the macros:  
`\addauthor[short]{long}`  
`\addauthor*[short]{long}`
  - Add **one** author to the list of the authors.
  - The “starred” version applies some visual indicators to the name. It may be used to indicate the name of the talker for example.



## Event Name

### Definition of the event name

- You could specify the name of the event for which the slides are written:  
`\event[short]{full}`
- the full name is displayed on the front page.
- the short name is displayed inside the foot line of the slides.

### Insert the event name in your slides

- You could insert the full name of the event with:  
`\inserteventname`
- You could insert the short name of the event with:  
`\insertshorteventname`

- You could change the name of the institute with:  
`\institute[short]{full}`
- the `full` name is displayed on the front page.
- the `short` name is displayed inside the foot line of the slides.
- The default full name is:  
**Université de Technologie de Belfort-Montbéliard**, 90010  
Belfort cedex, France - <http://irtes.utbm.fr>
- The default short name is: IRTES.

- You could change the URL of the institute with:  
`\instituteurl{url}`
- The default url is: `http://irtes.utbm.fr`
- To insert the institute's URL, you could use the macro:  
`\insertinstituteurl`

## Partner Logo

- You could add on all slides the logo of your partner:  
`\partnerlogo[options]{filename}`
- The IRTES theme has enough space for only one logo with a width of 2cm.
- The filename is the name of the picture.
- This figure is declared with `\pgfdeclareimage` with the key “IRTESpartnerlogo”.
- The options are passed to `\pgfdeclareimage`. The default option is `width=2cm`.

## Part Sectioning

- The IRTES theme provides a specific implementation of the `\part` macro:  
`\part[options]title`  
`\part*[options]title`
- Options may be:
  - a string value that is the “short” title of the part that is appearing in the table of contents.
  - the pair `title=text` to define the “short” title.
  - the pair `author=text` to define the author of the part.
- The starred version of `\part` does not add the part in the table of contents.

## Changing the prefix in the part's slides

- By default, each part is starting with a slide with only the part's title on, without a prefix such as "Chapter X".
- The IRTES theme provides the following macros to change the part's prefix:
  - `\insertpartprefix` insert the current part prefix.
  - `\partprefix[counter text]{text}` changes the prefix to "text" followed by "counter text".
  - `\resetpartprefix` resets the prefix to the empty text.

### Example

`\partprefix[\arabic{part}]{Chapter}` produces "Chapter 1", "Chapter 2", ...

## Table of Contents

- The IRTES theme provides a convenient macro to insert a table of contents:  
`\tableofcontentsslide[options]`
- It is equivalent to:  
`\begin{frame}[c]`  
`\frametitle{\translate{Outline}}`  
`\tableofcontents[options]`  
`\end{frame}`
- The option `onlyparts` permits to display the list of the parts, only.

## Figure Slide

The IRTES theme provides a macro that permits to display a picture on the entire slide:

- `\figureslide[width=V,height=V,scale=V]{Title of the slide}{file}`
- Example: `\figureslide{XyZ}{irteslogo}`





## A Conclusion Slide

- The IRTES theme automatically adds a slide at the end of the presentation to avoid “black” screen.
- The default text on this slide is: “Thank you for your attention...”.
- An other text that is available is: “Questions...”.
- The class options `thanksslide` and `questionslide` permits to select one of these possibilities.
- The macro `\finalslidetext{text}` may be used to set the text by hand.
- This slide has the label `finalslide` for `\hyperlink`.

## Appendix

- The IRTES theme supports the appendix.
- To create the appendix, you must:
  - 1 put the macro `\appendix` in your  $\text{T}_{\text{E}}\text{X}$  file; or
  - 2 put the macro `\bibliography` in your  $\text{T}_{\text{E}}\text{X}$  file.
- All the slides put after the creation of the appendix by one of these methods are assumed to be part of the appendix.
- The slides in the appendix are not considered in the total number of slides for the core part of the document (see `\inserttotalcoreframenumbers`).
- The slide numbers in the appendix are roman (not arabic), and the numbers are reset.

## Bibliography

- You are able to include a bibliography in your slides with the two standard  $\text{\LaTeX}$  macros:  
`\bibliographystyle{style}`  
`\bibliography{filename}`
- The default style is `apalike`.
- When the macro `\bibliography` is used, the appendix section is started if it was not already done.
- The bibliography slides are **always** at the end of the document. Even if you put slides after the `\bibliography` macro.
- The first slide of the bibliography has the label `bibliographyslide` for `\hyperlink`.

- You are able to include a list of books in your presentation with the macro:  

```
\libraryslide[options]{picture}  
{title}{authors}{How published}{ISBN}
```
- The macro create a slide for a book.
- The options may be a text that is the subtitle of the book (see parameter subtitle below), or a list of parameters in:
  - `frametitle=text`: specifies the title of the frame.
  - `subtitle=text`: specifies the subtitle of the book.

## Headline

- Beamer provides an headline in which the progress of the presentation may be shown. In the IRTES theme, this headline is located in place of the IRTES logo, at the top left of the slides.
- You could change this headline with:
  - `\useheaderempty`: the headline is empty.
  - `\useheaderdefault`: the headline is filled with the default value (may be changed with one of the following macros).
  - `\useheaderlinewithirteslogo`: the default headline contains the IRTES logo.
  - `\useheaderlinewithsections`: the default headline contains the sections of the presentation.

- The IRTES theme defines the official colors given by UTBM:
  - IRTESblue : Example
  - IRTESmagenta : Example
  - IRTESgreen : Example
- The colors extracted from the background pictures are:
  - IRTESlightblue : Example
  - IRTESlightestblue : Example
  - IRTESlightmagenta : Example
  - IRTESlightestmagenta : Example
  - IRTESdarkgray : Example

## Colorized Tables

- The IRTES theme put colorized borders around tables.
- In addition, you could create a table heading with specific colors:
  - `\tabularheading` to use the heading background.
  - `\thead{text}` to define the text of a column heading.

### Example

```
\begin{tabular}{|l|l|}\\  
\hline  
\tabularheading\thead{A}&\thead{B}\\  
\hline  
\C&D\\  
\end{tabular}
```

A	B
C	D

## Alert Boxes

The IRTES theme defines the a box for alerts:

- `\alertbox<frame_spec>{this is an alert text}`

this is an alert text

- `\alertbox*<frame_spec>{this is an alert text}`

this is an alert text

- Note that `<frame_spec>` is optional. It permits to specify the Beamer frame in which the box is displayed.



## Enhanced Description

The IRTES theme provides an enhanced definition of the description environment.

```
\begin{description}  
  \item text1  
  \item[Item Name] text2  
  \item<frame_spec> text1  
  \item<frame_spec> [Item Name] text2  
\end{description}
```

- text1
- Item Name: text2
- 
- Item Name: text2

## Enhanced Description

The IRTES theme provides an enhanced definition of the description environment.

```
\begin{description}  
\item text1  
\item[Item Name] text2  
\item<frame_spec> text1  
\item<frame_spec>[Item Name] text2  
\end{description}
```

- text1
- Item Name: text2
- text1
- Item Name: text2

## Enhanced Enumeration(1/2)

The IRTES theme provides an enhanced definition of the `enumerate` environment.

```
\begin{enumerate}[counter format]  
\item text1  
\item[Item Name] text2  
\item<frame_spec> text1  
\item<frame_spec>[Item Name] text2  
\end{enumerate}
```

1 text1

2 Item Name: text2

3

4 Item Name: text2

## Enhanced Enumeration(1/2)

The IRTES theme provides an enhanced definition of the `enumerate` environment.

```
\begin{enumerate}[counter format]  
\item text1  
\item[Item Name] text2  
\item<frame_spec> text1  
\item<frame_spec>[Item Name] text2  
\end{enumerate}
```

- 1 text1
- 2 Item Name: text2
- 3 text1
- 4 Item Name: text2

## Enhanced Enumeration(2/2)

Below, the optional parameter counter format is set to "a)":

- a) text1
- b) **Item Name:** text2
- c) text1
- d) **Item Name:** text2

## Enhanced Enumeration(2/2)

Below, the optional parameter counter format is set to "a)":

- a) text1
- b) **Item Name:** text2
- c) text1
- d) **Item Name:** text2

## Text Size

In addition to the standard Beamer macros for selected the text size (`\TINY`, `\Tiny`, `\tiny`, `\footnotesize`, `\scriptsize`, `\small`, `\normalsize`, `\large`, `\Large`, `\huge`, `\Huge`), the IRTES theme enables the following macros:

- `\smaller` : to decrease the size of the text, and
- `\larger` : to increase the size of the text.

## Emphazed Text

- The IRTES theme redefines the macro `\emph` to display the emphasized text with a color.  
Example: `This is an emphazed text.`
- The IRTES theme defines the macro `\Emph` to display the “very emphasized” text with a color.  
Example: `This is a “very emphazed” text.`



## Underlining

- The IRTES theme redefines the macro `\underline` to move the line closer to the text.
- Before: Example
- After: Example

## Additional Symbols

- The IRTES theme (re)defines the macros for several symbols

From IRTES theme		From T <sub>E</sub> X	
<code>\copyright</code>	©	<code>\copyright</code>	©
<code>\trademark</code>	™	<code>\texttrademark</code>	™
<code>\regmark</code>	®	<code>\textregistered</code>	®

## Exponents and Indices

- The IRTES theme (re)defines the macros to put text in exponent or in indice.
- The macros `\textup` and `\textdown` try to add a space after the text, when it is allowed by the typographic rules (it uses the macro `\xspace`).

From IRTES theme		From T <sub>E</sub> X	
<code>\textup</code>	ABC <sup>ABC</sup> D	<code>\textsuperscript</code>	ABC <sup>ABC</sup> D
<code>\textsubscript</code>	ABC <sub>ABC</sub> D	-	-
<code>\textdown</code>	ABC <sub>ABC</sub> D	-	-

## Example Sections

The IRTES theme defines the the following macros to put examples in the text (not in a block, as predefined in Beamer):

- `\insertexamplelabel` insert the text “example”.
- `\insertexampleslabel` insert the text “examples”.
- `\inlineexample{text}` insert a example in the text.  
Example: This is a text followed by an inline example.  
`\inlineexample{some text.}`  
This is a text followed by an inline example. **Example:** some text.
- `\inlineexamples{text}` insert examples in the text.  
Example: This is a text followed by inline examples.  
`\inlineexamples{some text.}`  
This is a text followed by inline examples. **Examples:** some text.

## Footnotes

- The IRTES theme provides two versions of the footnote macro:
  - `\footnote{text}` shows a footnote with a number, and
  - `\footnote*{text}` shows a footnote without a number.
- Additionally, a footnote with bibliography citation may be added:
  - `\footcite{keys}` shows the given citations in a footnote.

## Side Notes



- The IRTES theme provides a macro to put a text on the side of the frame  
`\sidenode{text}`
- Example: `\sidenote{text on the side}`

## Localized Quotes

- The IRTES theme provides macros to output localized quotes:
  - **English:** `\ukquotetext`  
Example: `"text"`
  - **French:** `\frquotetext`  
Example: `«text»`
  - **Latin:** `\latquotetext`  
Example: `text`
- The following macros are used by the quote macros:
  - `\textgravedbl :` `"`
  - `\textacutedbl :` `"`
  - `\guillemotleft :` `«`
  - `\guillemotright :` `»`

## Frame Number

- The total number of slides in the core part of the presentation could be obtained with:  
`\inserttotalcoreframenumbers`
- The following macro provides the progression in the slides:
  - `\insertframenumbers[type number]`
  - The type number is the identifier of the progress bar to be used:

Type number	Output	Explanation
0		Show the current frame and its position in the total number of frames.
1	37/43	Show the current frame and the total number of frames.
2		Same as the type 0 with a progression bar for the current section.



## Multimedia Link

- The IRTES theme provides a convenient macro to include links to multimedia resources.
- `\videolink[options]{resource_path}{img_path}`
  - Display a picture with a link button. When the user click on the picture, the resource is run (viewed).
  - `options` are the options to pass to the `\includegraphics` (width...)
  - `resource_path` is the path to the multimedia resource.
  - `img_path` is the path to the picture to display in the slide.



## Link to a Slide from an Picture

- The IRTES theme provides a convenient macro to create links to other slides with a picture in the link.
- `\picturegoto[options]{label}{img_path}`
  - Display a picture with a link button. When the user click on the picture, the slide with the given label is displayed.
  - `options` are the options to pass to the `\includegraphics (width...)`
  - `label` is the label of the target slide.
  - `img_path` is the path to the picture to display in the slide.



## Zooming on a T<sub>E</sub>X Box (1/2)

- Beamer provides the macro `\framezoom` to zoom on a part of a frame. But, it create a new slide and it is difficult to return to the original slide with a single click.
- The IRTES theme provides a new macro for zooming on click.
- `\zoombox[options]{box content}`
  - Display the content of the box. When clicked, display the box content after fitting it to the entire screen. When clicked again, the original slide is restore.
  - options are:
    - 1 `border=XXpt`: specify the size of the border lines around the box.
    - 2 `left=XXpt`: specify the size of the left margin.
    - 3 `right=XXpt`: specify the size of the right margin.
    - 4 `top=XXpt`: specify the size of the top margin.
    - 5 `bottom=XXpt`: specify the size of the bottom margin.
    - 6 `margin=XXpt`: specify the size of all of the margins.

## Zooming on a T<sub>E</sub>X Box (2/2)

### Caution

The macro `\zoombox` is working in viewers that are supporting JavaScript (Acrobat Reader...)

ZOOMING EXAMPLE

## Adjusting a Box

- The IRTES style provides the macro `\adjustbox` to add margins to a box.
- `\adjustbox[options]{box content}`
- The options are:
  - `left=XXpt` is the size of the left margin.
  - `right=XXpt` is the size of the right margin.
  - `top=XXpt` is the size of the top margin.
  - `bottom=XXpt` is the size of the bottom margin.
  - `size=XXpt` is the size of all of the margins.

## Put at absolute position

- If you want to put something at an absolute position in your frame, you could use:

```
\putat(x,y){something}
```

- Example:

```
\putat(0,-150){\color{red}{TESTING}}
```

## TESTING



# End of the Documentation