

# 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

Stéphane Galland

# Outline

- 1 Introduction
- 2 Document Attributes
- 3 Document Structure
- 4 Slide Content

## 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.

## 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.

## Picture Slide

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

- `\figureslide[width=XXX,height=YYY]{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[subtitle or comment]{picture}  
{title}{authors}{How published}{ISBN}
```

- The macro create a slide for a book.

## Colors

The IRTES theme defines the following colors:

- IRTESblue : [Example](#)
- IRTESmagenta : [Example](#)
- IRTESlightblue : [Example](#)
- IRTESdarkgray : [Example](#)

## 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.

## 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	-	-

## 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:  
`\inserttotalcoreframenumber`
- The following macro provides the progression in the slides:
  - `\insertframenumbering[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	32/38	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

# IRTES

sciences & ingénierie

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

UNIVERSITÉ DE TECHNOLOGIE DE BELFORT-MONTBELIARD

## End of the Documentation