

# Documentation of the LE2I-UTBM Theme for Beamer

Macros provided by the theme

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- 2 Predefined Values
- 3 Class and Preamble
- 4 Parts and Sections
- 5 Special Slides
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- 1 Introduction
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- This document explains the  $\text{\LaTeX}$  macros that are provided by the LE2I-UTBM theme for beamer.
- To use the LE2I-UTBM theme for beamer, you must:
  - 1 Install the files of the LE2I-UTBM theme inside your  $\text{\LaTeX}$  distribution.
  - 2 Create a document, which uses the document class:  
`le2iutbmbeamer`

- Provide the unofficial style for the research group of the LE2I located at the UTBM.
- 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.
- Provide high level macros for building the slides.

- 1 Introduction
- 2 Predefined Values
  - Colors
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- The LE2I-UTBM theme defines the official colors:
  - LE2IUTBMblue : Example
  - LE2IUTBMmagenta : Example
  - LE2IUTBMgreen : Example
  - LE2IUTBMlightblue : Example
  - LE2IUTBMlightestblue : Example
  - LE2IUTBMlightmagenta : Example
  - LE2IUTBMlightestmagenta : Example
  - LE2IUTBMdarkgray : Example

## 1 Introduction

## 2 Predefined Values

## 3 Class and Preamble

- Class Options
- Title and Subtitle
- Authors
- Event Name
- Institute Name and URL

## 4 Parts and Sections

## 5 Special Slides

## 6 Header and Footer Tuning



The document class `le2iutbmbeamer` 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](#)

- `partcircnumberstyle`: similar to `circnumberstyle` except that the indicator is reset at the start of each part.
- `partsectioncircnumberstyle`: similar to `sectioncircnumberstyle` except that the indicator is reset at the start of each part.
- `nonumberstyle`: the frame numbers are not output.
- `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

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

## Subitle

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

- These macros must be put in the preamble of your document.

- 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 (underline, etc.) It may be used to indicate the name of the talker for example.

- These macros must be put in the document preamble.

## 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.
- Put these macros into the document preamble.

## 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 the following macro in the document preamble:  
`\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 Bourgogne Franche-Comté - UTBM - LE2I**,  
 90010 Belfort cedex, France - <http://le2i.cnrs.fr>
- The default short name is: LE2I-UTBM.

- You could change the URL of the institute with:  
`\instituteurl{url}`
- The default url is: `http://le2i.cnrs.fr`
- To insert the institute's URL, you could use the macro:  
`\insertinstituteurl`

- 1 Introduction
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- 3 Class and Preamble
- 4 Parts and Sections**
  - Table of Contents
  - Part Sectioning
  - Appendix
  - Bibliography
- 5 Special Slides
- 6 Header and Footer Tuning



- The LE2I-UTBM 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}
```

- In addition to the standard options of `\tableofcontents`, the option `onlyparts` permits to display the list of the parts, only.

- The LE2I-UTBM 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 pair `label=id` to define the label of the part at the correct page.
- The starred version of `\part` does not add the part in the table of contents.

- By default, each part is starting with a slide with only the part's title on, without a prefix such as “Chapter X”.
- The LE2I-UTBM 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”, ...

- The LE2I-UTBM 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 that are put after the creation of the appendix 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.

- You are able to include a bibliography in your slides with the two standard  $\text{\LaTeX}$  macros:  
 $\backslash\text{bibliographystyle}\{\text{style}\}$   
 $\backslash\text{bibliography}\{\text{filename}\}$
- The default style is `apalike`.
- When the macro  $\backslash\text{bibliography}$  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  $\backslash\text{bibliography}$  macro.
- The first slide of the bibliography has the label `bibliographyslide` for  $\backslash\text{hyperlink}$ .

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- 5 Special Slides**
  - Figure Slide
  - Final Slide
  - Book Description
- 6 Header and Footer Tuning

The LE2I-UTBM 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}{le2iilogo}`



- The L2EI-UTBM 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` permit 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`.



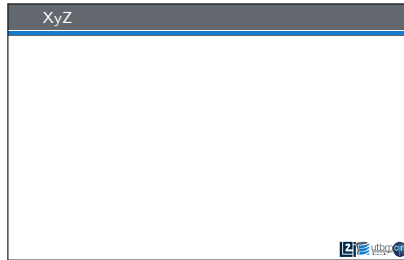
- You are able to include a list of books in your presentation with the macro:

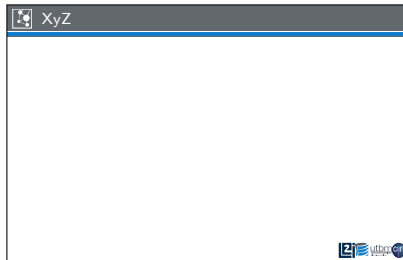
```
\libraryslide[options]{picture}
{title}{authors}{How published}{ISBN}
```

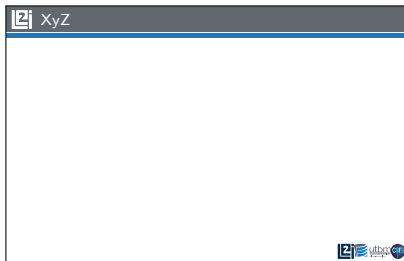
- The macro creates a slide for a book.
- The options may be composed of pairs of name-value:
  - frametitle=text: specifies the title of the frame.
  - subtitle=text: specifies the subtitle of the book.
- If a name is not specified in the options, the “subtitle” name is assumed.

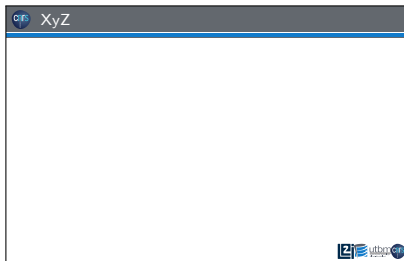
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  - **Headline**
  - **Partner Logo**
  - **Frame Number**

- Beamer provides an headline in which the progress of the presentation may be shown. In the LE2I-UTBM theme, this headline is located 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).
  - `\useheaderlinewithmaglogo`: the default headline contains the Multiagent Group logo.
  - `\useheaderlinewithleiilogo`: the default headline contains the LE2I logo.
  - `\useheaderlinewithcnrslogo`: the default headline contains the CNRS logo.
  - `\useheaderlinewithsections`: the default headline contains the sections of the presentation.









- To change the style of the headline, you could set the Beamer template “headline text style”.
- Example:  
`\setbeamertemplate{headline text style}{\Tiny}`  
changes the size of the headline’s text to the Tiny size.



- You could add on all slides the logo of your partner:  
`\partnerlogo[options]{filename}`
- The LE2I-UTBM theme recommends a logo with a width of 2cm.
- The filename is the name of the picture.
- This figure is declared with `\pgfdeclareimage` with the key “LE2IUTBMpartnerlogo”.
- The figure could be re-used with `\pgfuseimage`.
- The options are passed to `\pgfdeclareimage`. The default option is `width=2cm`.


- 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:

- `\insertframenumering[type number]`

- The type number is the identifier of the progress bar to be used:

Type number	Output	Explanation
1		Show the current frame and its position in the total number of frames.
2	34/57	Show the current frame and the total number of frames.
3		Same as the type 1 with a progression bar for the current section.

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  - Colorized Tables
  - Alert Boxes
  - Enhanced Description
  - Enhanced Enumeration

- The LE2I-UTBM theme puts 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

The LE2I-UTBM 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.

The LE2I-UTBM 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

The LE2I-UTBM 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

The LE2I-UTBM 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



The LE2I-UTBM 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

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

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

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

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

- The standard Beamer macros for selected the text side are:

`\TINY`, `\Tiny`, `\tiny`, `\scriptsize`, `\footnotesize`, `\small`,  
`\normalsize`, `\large`, `\Large`, `\huge`,  
`\Huge`

- The LE2I-UTBM theme includes two additional macros:
  - `\smaller` : to decrease the size of the text, and
  - `\larger` : to increase the size of the text.

- The LE2I-UTBM theme redefines the macro `\emph` to display the emphasized text with a color.  
Example: **This is an emphasized text.**
- The LE2I-UTBM theme defines the macro `\Emph` to display the “very emphasized” text with a color.  
Example: **This is a “very emphasized” text.**

- The LE2I-UTBM theme redefines the macro `\underline` to move the line closer to the text.
- Before: Example
- After: Example

- The LE2I-UTBM theme (re)defines the macros for several symbols:

From LE2I-UTBM theme		From T <sub>E</sub> X	
<code>\copyright</code>	©	<code>\copyright</code>	©
<code>\trademark</code>	™	<code>\texttrademark</code>	™
<code>\servicemark</code>	SM	<code>\textservicemark</code>	SM
<code>\regmark</code>	®	<code>\textregistered</code>	®
<code>\checkmark</code>	✓	<code>\textcheckmark</code>	✓
<code>\xmark</code>	✗		

- The LE2I-UTBM 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 LE2I-UTBM 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	-	-



- When continuing a frame, Beamer insert the “continuation text” after the title.
- To insert the continuation text manually, you should use:  
`\insertcontinuationwith{integer}`
- The parameter is the value of the continuation counter to display.
- Example: in the following frame, the macro is used in the title  
`\insertcontinuationwith{34}`.

The continuation text in the title of this frame is given by the macro `\insertcontinuationwith{34}`.

The LE2I-UTBM 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.

- The LE2I-UTBM theme provides two versions of the footnote macro:
  - `\footnote{text1}` shows a footnote<sup>1</sup> with a number, and
  - `\footnote*{text2}` shows a footnote without a number.
- Additionally, a footnote with bibliography citation may be added:
  - `\footcite{keys}` shows the given citations in a footnote.

<sup>1</sup>text1  
text2

- The LE2I-UTBM theme provides a macro to put a text on the side of the frame:

```
\sidenode{text}
```

- Example: `\sidenote{text on the side}`

- The LE2I-UTBM theme provides macros to output localized quotes:
  - **English:** `\ukquote{text}`  
Example: *"text"*
  - **French:** `\frquote{text}`  
Example: *« text »*
  - **Latin:** `\latquote{text}`  
Example: *text*
  
- The following macros are used by the quote macros:
  - `\textgravedbl :` *"*
  - `\textacutedbl :` *"*
  - `\guillemotleft :` *«*
  - `\guillemotright :` *»*

- The LE2I-UTBM 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.



- The LE2I-UTBM 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.





- 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 LE2I-UTBM 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.

### Caution

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

## ZOOMING EXAMPLE

- The LE2I-UTBM 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.

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

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

- Example:

```
\putat(56,-170){\color{red}{TESTING}}
```

**TESTING**

# End of the Documentation