

The beamer theme for the typesetting of thesis defense presentations at the Masaryk University in Brno

Vít Novotný

June 17, 2016

Abstract

This document details the design and the implementation of the `fbeamer` theme for the `beamer` document class. Included are technical information for anyone who wishes to extend the theme with their own `beamer` themes as well as information for ordinary users.

Contents

| | |
|---|----------|
| 1 Basic usage | 2 |
| 2 Package options | 2 |
| 2.1 The <code>fonts</code> option | 2 |
| 2.2 The <code>nofonts</code> option | 3 |
| 2.3 The <code>microtype</code> option | 3 |
| 2.4 The <code>nomicrotype</code> option | 3 |
| 2.5 The <code>university</code> option | 3 |
| 2.6 The <code>faculty</code> option | 3 |
| 2.7 The <code>locale</code> option | 4 |
| 2.8 The <code>logoLocale</code> option | 4 |
| 2.9 The <code>basePath</code> option | 4 |
| 2.10 The <code>themePath</code> option | 6 |
| 2.11 The <code>logoPath</code> option | 6 |
| 2.12 The <code>logo</code> option | 6 |
| 2.13 The <code>fallbackLogo</code> option | 7 |
| 3 Logic | 7 |
| 3.1 Macros | 7 |
| 3.2 Main routine | 8 |

| | |
|---|-----------|
| 4 Themes | 10 |
| 4.1 Base files | 10 |
| 4.1.1 The theme/mu/beamercolorthemefibeamer-mu.sty file . . . | 10 |
| 4.1.2 The theme/mu/beamerfontthemefibeamer-mu.sty file . . . | 12 |
| 4.1.3 The theme/mu/beamerinnerthemefibeamer-mu.sty file . . . | 12 |
| 4.1.4 The theme/mu/beamerouterthemefibeamer-mu.sty file . . . | 13 |
| 4.2 The Faculty of Informatics | 16 |
| 4.2.1 The theme/mu/beamercolorthemefibeamer-fi.sty file . . . | 16 |
| 4.3 The Faculty of Science | 18 |
| 4.3.1 The theme/mu/beamercolorthemefibeamer-sci.sty file . . | 18 |
| 4.4 The Faculty of Arts | 21 |
| 4.4.1 The theme/mu/beamercolorthemefibeamer-phil.sty file . . | 21 |
| 4.5 The Faculty of Education | 23 |
| 4.5.1 The theme/mu/beamercolorthemefibeamer-ped.sty file . . | 23 |
| 4.6 The Faculty of Social Studies | 25 |
| 4.6.1 The theme/mu/beamercolorthemefibeamer-fss.sty file . . | 25 |
| 4.7 The Faculty of Law | 27 |
| 4.7.1 The theme/mu/beamercolorthemefibeamer-law.sty file . . | 27 |
| 4.8 The Faculty of Economics and Administration | 30 |
| 4.8.1 The theme/mu/beamercolorthemefibeamer-econ.sty file . . | 30 |
| 4.9 The Faculty of Medicine | 32 |
| 4.9.1 The theme/mu/beamercolorthemefibeamer-med.sty file . . | 32 |
| 4.10 The Faculty of Sports Studies | 34 |
| 4.10.1 The theme/mu/beamercolorthemefibeamer-fsp.s.sty file . . | 34 |

1 Basic usage

In order to use the fibeamer theme, insert `\usetheme[⟨options⟩]{fibeamer}` into the preamble of a L^AT_EX document that uses the beamer document class. Refer to Section 2 for the list of available *options*.

2 Package options

2.1 The fonts option

`\iffibeamer@fonts` The fonts option instructs the package to set up the combination of the font families of Carlito, Arev, Iwona, Dsfont, and DejaVu for the typesetting of text and mathematics. This option is enabled by default.

```

1 \ProvidesPackage{fibeamer/beamerthemefibeamer}[\fibeamer@version]
2 \newif\iffibeamer@fonts
3 \DeclareOptionBeamer{fonts}{\fibeamer@fontstrue}
4 \ExecuteOptionsBeamer{fonts}

```

2.2 The `nofonts` option

The `nofonts` option instructs the package not to alter the currently set text and mathematics font families.

```
5 \DeclareOptionBeamer{nofonts}{\fibeamer@fontsfals}
```

2.3 The `microtype` option

\iffifeamer@microtype The `microtype` option instructs the package to use the microtypographic extensions of modern \TeX engines, such as $\text{pdf}\text{\TeX}$, $\text{Lua}\text{\TeX}$, and (with only partial support) $\text{Xe}\text{\TeX}$. This option is enabled by default.

```
6 \newif\iffifeamer@microtype  
7 \DeclareOptionBeamer{microtype}{\fibeamer@microtypetrue}  
8 \ExecuteOptionsBeamer{microtype}
```

2.4 The `nomicrotype` option

The `nomicrotype` option disables the microtypographic extensions. This may be necessary, if an older \TeX engine, such as \TeX or $\varepsilon\text{-}\text{\TeX}$, is being used.

```
9 \DeclareOptionBeamer{nomicrotype}{\fibeamer@microtypefalse}
```

\fibeamer@university **2.5 The `university` option**

The `{<university=identifier>}` option pair sets the identifier of the university, at which the presentation is being written, to *identifier*. The *identifier* is stored within the `\fibeamer@university` macro, whose implicit value is `mu`. This value corresponds to the Masaryk University in Brno.

```
10 \DeclareOptionBeamer{university}{\def\fibeamer@university{\#1}}  
11 \ExecuteOptionsBeamer{university=mu}
```

\fibeamer@faculty **2.6 The `faculty` option**

The `{<faculty=identifier>}` pair sets the faculty, at which the thesis is being written, to *domain*. The following faculty *identifiers* are recognized at the Masaryk University in Brno:

| The faculty | The <i>domain name</i> |
|---|------------------------|
| The Faculty of Informatics | fi |
| The Faculty of Science | sci |
| The Faculty of Law | law |
| The Faculty of Economics and Administration | econ |
| The Faculty of Social Studies | fss |
| The Faculty of Medicine | med |
| The Faculty of Education | ped |
| The Faculty of Arts | phil |
| The Faculty of Sports Studies | fsps |

The *identifier* is stored within the `\fibeamer@faculty` macro, whose implicit value is `fi`.

```
12 \DeclareOptionBeamer{faculty}{\def\fibeamer@faculty{\#1}}
13 \ExecuteOptionsBeamer{faculty=fi}
```

\fibeamer@locale 2.7 The locale option

The `{<locale=name>}` pair sets the name of the main locale to *name*. The *name* is stored within the `\fibeamer@locale` macro, whose implicit value is the main language of either the `babel` or the `polyglossia` package, or `english`, when undefined.

With regards to the themes of the Masaryk University in Brno, the `\fibeamer@locale` macro is not used; it only provides the default value to the `\fibeamer@logoLocale` macro.

```
14 \def\fibeamer@locale{%
15   % Babel / polyglossia detection
16   \ifx\languagename\undefined%
17     english\else\languagename\fi}
18 \DeclareOptionBeamer{locale}{%
19   \def\fibeamer@locale{\#1}}
```

\fibeamer@logoLocale 2.8 The logoLocale option

The `{<logoLocale=name>}` pair sets the logo file locale to *name*. The *name* is stored within the `\fibeamer@logoLocale` macro, whose implicit value is `\fibeamer@locale`.

```
20 \def\fibeamer@logoLocale{\fibeamer@locale}
21 \DeclareOptionBeamer{logoLocale}{%
22   \def\fibeamer@logoLocale{\#1}}
```

\fibeamer@basePath 2.9 The basePath option

The `{<basePath=path>}` pair sets the *path* containing the package files. The *path* is prepended to every other path (`\fibeamer@logopath` and `\fibeamer@themePath`)

used by the package. If non-empty, the *path* gets normalized to *path/*. The normalized *path* is stored within the `\fibeamer@basePath` macro, whose implicit value is `fibeamer/`.

```

23 \DeclareOptionBeamer{basePath}{%
24   \ifx\fibeamer@empty\empty\def\fibeamer@basePath{}%
25   \else%
26     \def\fibeamer@basePath{\#1}%
27   \fi}
28 \ExecuteOptionsBeamer{basePath=fibeamer}
```

`\fibeamer@subdir` The `\fibeamer@subdir` macro returns `/` unchanged, coerces `., . . . /path`, `./path` and `../path` to `./`, `./ . . . /path`, `./path/` and `../path/`, respectively, and prefixes any other *path* with `\fibeamer@basePath`. This macro is used within the definition of the `themePath` and `logoPath` options.

```

30 \def\fibeamer@subdir#1#2#3#4\empty{%
31   \ifx#1\empty%           <empty> -> <basePath>
32     \fibeamer@basePath
33   \else
34     \if#1/
35       \ifx#2\empty%          / -> /
36         %
37       \else%                  /<path> -> /<path>/
38         #1#2#3#4%
39     \fi
40   \else
41     \if#1.%
42       \ifx#2\empty%          . -> ./
43         .%
44       \else
45         \if#2.%
46           \ifx#3\empty%        .. -> ../
47             ../%
48           \else
49             \if#3/%    ../<path> -> ../<path>/
50               ../#4%
51             \else
52               \fibeamer@basePath#1#2#3#4%
53             \fi
54           \fi
55         \else
56           \if#2/%    ./<path> -> ./<path>/
57             ./#3#4%
58           \else
59             \fibeamer@basePath#1#2#3#4%
60           \fi
61         \fi
62       \fi
63     \else
```

```

64          \fibeamer@basePath#1#2#3#4/%
65      \fi
66  \fi
67 \fi}

```

\fibeamer@themePath 2.10 The themePath option

The $\{\langle\text{themePath}=\text{path}\rangle\}$ pair sets the *path* containing the theme files. The *path* is normalized using the `\fibeamer@subdir` macro and stored within the `\fibeamer@stylePath` macro, whose implicit value is `\fibeamer@basePath theme/`. By default, this expands to `fibeamer/theme/`.

```

68 \DeclareOptionBeamer{themePath}{%
69   \def\fibeamer@themePath{\fibeamer@subdir#1%
70     \empty\empty\empty\empty}}%
71 \ExecuteOptionsBeamer{themePath=theme}

```

\fibeamer@logoPath 2.11 The logoPath option

The $\{\langle\text{logoPath}=\text{path}\rangle\}$ pair sets the *path* containing the logo files, which is used by the outer themes to load the main logo. The *path* is normalized using the `\fibeamer@subdir` macro and stored within the `\fibeamer@logoPath` macro, whose implicit value is `\fibeamer@basePath` followed by `logo/\fibeamer@university`. By default, this expands to `fibeamer/logo/mu/`.

```

72 \DeclareOptionBeamer{logoPath}{%
73   \def\fibeamer@logoPath{\fibeamer@subdir#1%
74     \empty\empty\empty\empty}}%
75 \ExecuteOptionsBeamer{logoPath=logo/\fibeamer@university}

```

\fibeamer@logo 2.12 The logo option

The $\{\langle\text{logo}=\text{filename}\rangle\}$ pair sets the prefix of the filename of the main logo to *filename*. The *filename* is stored within the `\fibeamer@logo` macro, whose implicit value is `\fibeamer@logoPath` followed by `fibeamer-\fibeamer@university-\fibeamer@faculty-\fibeamer@logoLocale`. By default, this expands to `fibeamer/logo/fibeamer-mu-fi-english`.

```

76 \DeclareOptionBeamer{logo}{\def\fibeamer@logo{\#1}}
77 \ExecuteOptionsBeamer{%
78   logo=\fibeamer@logoPath fibreame-\fibeamer@university-%
79     \fibeamer@faculty-\fibeamer@logoLocale}

```

\fibeamer@fallbackLogo

2.13 The `fallbackLogo` option

The `\fibeamer@fallbackLogo` macro contains the filename of the logo file to be used, if `\fibeamer@logo` does not exist. The implicit value of the `\fibeamer@fallbackLogo` macro is `\fibeamer@logoPath` followed by `fibeamer-\fibeamer@uni-versity\fibeamer@faculty-english`. By default, this expands to `fibeamer/logo/fibeamer-mu-fi-english`.

```
80 \DeclareOptionBeamer{fallbackLogo}{\def\fibeamer@fallbackLogo{\#1}}
81 \def\fibeamer@fallbackLogo{%
82   \fibeamer@logoPath fibreame-\fibeamer@university-%
83   \fibeamer@faculty-english}
```

3 Logic

3.1 Macros

\fibeamer@require

The `\fibeamer@require{<package>}` macro is used to gracefully load a *package*. Packages that have already been loaded or do not exist are ignored by the macro.

```
84 \def\fibeamer@require#1{\IfFileExists{\#1.sty}{%
85   \@ifpackageloaded{\#1}{}{\RequirePackage{\#1}}}}
```

\fibeamer@requireTheme

The `\fibeamer@requireTheme{<class>}` macro is used to load a *class* of beamer themes. The following packages are loaded, provided they exist:

- `beamerclassthemefibeamer` from the `\fibeamer@themePath` directory – The base theme file. By default, this expands to `fibeamer/theme/beamerclassthemefibeamer`.
- `beamerclassthemefibeamer-\fibeamer@university` from the `\fibeamer@themePath\fibeamer@university/` directory – The university theme file. By default, this expands to `fibeamer/theme/mu/beamerclassthemefibeamer-mu`.
- `beamerclassthemefibeamer-\fibeamer@university-\fibeamer@faculty` from the `\fibeamer@themePath\fibeamer@university/` directory – The faculty theme file. By default, this expands to `fibeamer/theme/mu/beamerclassthemefibeamer-mu-fi`.

```
86 \def\fibeamer@requireTheme#1{%
87   \fibeamer@require{\fibeamer@themePath beamer#1themefibeamer}
88   \fibeamer@require{\fibeamer@themePath\fibeamer@university%
89     /beamern#1themefibeamer-\fibeamer@university}
90   \fibeamer@require{\fibeamer@themePath\fibeamer@university%
91     /beamern#1themefibeamer-\fibeamer@university-\fibeamer@faculty}}
```

\fibeamer@includeLogo

The `\fibeamer@includeLogo[<options>]` macro includes the main logo into the document. If specified, the *options* are passed to the `\includegraphics` macro. The `\fibeamer@includeLogo` macro requires the `etoolbox` package to function.

```
92 \fibeamer@require{etoolbox}
93 \newcommand\fibeamer@includeLogo[1][]{%
94   % See <http://tex.stackexchange.com/a/39987/70941>.
```

```

95 \patchcmd{\Gin@ii}{\includegraphics}{\fibeamer@fallbackLogo}{}{%
96   {\begingroup}{} <search>
97   {\begingroup\renewcommand{\@latex@error}[2]{%
98     \includegraphics[#1]\fibeamer@fallbackLogo}}{} <replace>
99   {} <success>
100  {} <failure>
101  \includegraphics[#1]\fibeamer@logo}

\fibeamer@patch The \fibeamer@patch[<versions>][<patch>] macro expands patch, if \fibeamer@version@number (defined at the top of the file beamertthemefibeamer.sty) matches any of the comma-delimited versions. This macro enables the simple deployment of version-targeted patches.
102 \def\fibeamer@patch#1#2{%
103   \def\fibeamer@patch@versions[#1]{%
104     \def\fibeamer@patch@action[#2]{%
105       \def\fibeamer@patch@next##1,{%
106         \def\fibeamer@patch@arg{##1}%
107         \def\fibeamer@patch@relax{\relax}%
108         \ifx\fibeamer@patch@arg\fibeamer@version@number
109           \def\fibeamer@patch@next####1\relax,{()}%
110           \expandafter\fibeamer@patch@action
111           \expandafter\fibeamer@patch@next
112         \else\ifx\fibeamer@patch@arg\fibeamer@patch@relax\else
113           \expandafter\expandafter\expandafter\fibeamer@patch@next
114         \fi\fi}%
115       \expandafter\expandafter\expandafter\fibeamer@patch@next
116       \expandafter\fibeamer@patch@versions\expandafter,\relax,}%

```

3.2 Main routine

First, the theme processes the options.

```
117 \ProcessOptionsBeamer
```

When the `microtype` option is specified, the `microtype` package gets loaded.

```

118 % Set up the microtypographic extensions
119 \iffibeamer@microtype
120   \RequirePackage{microtype}
121 \fi

```

When the `fonts` option is specified, the following packages will be used by the package to configure the fonts in the presentation mode:

- `ifthen` – This package is used to construct compound conditionals.
- `ifxetex`, `ifluatex` – These packages are used to detect the used \TeX engine.
- `lmodern` – The Latin Modern font family is used as a fallback for missing glyphs.
- `carlito` – The Carlito font family is used as the primary text and math font face.

- `arevmath` – The Arev Sans math font family is used for various symbols and greek alphabet.
- `iwona` – The Iwona font family is used for large math symbols.
- `dejavu` – The DejaVu Sans Mono font family is used for the typesetting of monospaced text.
- `setspace` – This package is used to adjust the leading to 115 %.
- `fontenc` – This package is used to set the font encoding to Cork. This package is only used outside the X_ET_EX and LuaT_EX engines.
- `fontspec` – This package is used to load fonts. This package is only used with the X_ET_EX and LuaT_EX engines.

```

122 \mode
123   % Set up the fonts
124   \iffibeamer@fonts
125     \RequirePackage{ifthen}
126     \RequirePackage{ifxetex}
127     \RequirePackage{ifluatex}
128     \RequirePackage{lmodern}
129     \RequirePackage[sfdefault,lf]{carlito}
130     \renewcommand*\oldstylenums[1]{{\carlitoOsF #1}}
131
132   %% Load arev with scaling factor of .85
133   %% See <http://tex.stackexchange.com/a/181240/70941>
134   \DeclareFontFamily{OML}{zavm}{\skewchar\font=127 }
135   \DeclareFontShape{OML}{zavm}{m}{it}{<-> s*.85} zavmri7m(){}
136   \DeclareFontShape{OML}{zavm}{b}{it}{<-> s*.85} zavmbi7m(){}
137   \DeclareFontShape{OML}{zavm}{m}{sl}{<->ssub * zavm/m/it){}
138   \DeclareFontShape{OML}{zavm}{bx}{it}{<->ssub * zavm/b/it){}
139   \DeclareFontShape{OML}{zavm}{b}{sl}{<->ssub * zavm/b/it){}
140   \DeclareFontShape{OML}{zavm}{bx}{sl}{<->ssub * zavm/b/sl}{}
141
142   \AtBeginDocument{
143     \SetSymbolFont{operators}{normal}{OT1}{zavm}{m}{n}
144     \SetSymbolFont{letters}{normal}{OML}{zavm}{m}{it}
145     \SetSymbolFont{symbols}{normal}{OMS}{zavm}{m}{n}
146     \SetSymbolFont{largesymbols}{normal}{OMX}{iwona}{m}{n}}
147   \RequirePackage[sans]{dsfont}
148
149   \ifthenelse{\boolean{xetex}\OR\boolean{luatex}}{
150     \RequirePackage{fontspec}
151     \setmonofont[Scale=0.85,Ligatures=TeX]{DejaVu Sans Mono}
152   }{
153     \usepackage[scaled=0.85]{DejaVuSansMono}
154     \RequirePackage[resetfonts]{cmap}
155     \RequirePackage[T1]{fontenc}
156   }

```

```

157     \RequirePackage{setspace}
158     \setstretch{1.15}
159 \fi
160 \mode
161 <all>

```

Finally, the color, font, inner and outer themes of the respective university and faculty will be loaded.

```

162 \fibeamer@requireTheme{color}
163 \fibeamer@requireTheme{font}
164 \fibeamer@requireTheme{inner}
165 \fibeamer@requireTheme{outer}

```

4 Themes

This section contains the combined documentation of all available themes. When creating a new theme file, it is advisable to create one self-contained dtx file, which is then partitioned into locale files via the docstrip tool based on the respective `\file` file. A macro `\file{<filename>}` is available for the sectioning of the documentation of various files within the dtx file. For more information about dtx files and the docstrip tool, consult the dtxtut, docstrip, doc and ltxdoc manuals.

4.1 Base files

4.1.1 The `theme/mu/beamercolorthemefibeamer-mu.sty` file

This is the base color theme for presentations written at the Masaryk University in Brno.

```

166 \NeedsTeXFormat{LaTeX2e}
167 \ProvidesPackage{fbeamer/theme/mu/%
168   beamercolorthemefibeamer-mu}[2016/05/06]

```

`\darkframes` The `\darkframes` environment switches the color definitions to render the enclosed frames in dark colors. This is a dummy definition, which will be overridden by the subsequently loaded color theme in the presentation mode.

```
169 \newenvironment{darkframes}{}{}
```

The rest of the theme will be ignored outside the presentation mode.

```
170 \mode
```

The theme loads the following packages, which will be used by the subsequently loaded color theme specific to a faculty:

- `listings` – This package is used for code listings. The subsequently loaded color theme will specify source code coloring for the package.
- `ifthen` – This package is used to construct compound conditionals.
- `tikz` – This package is used to create gradient background for dark slides.

```

171 \RequirePackage{listings}
172 \RequirePackage{ifthen}
173 \RequirePackage{tikz}
```

\iffibeamer@dark The `\iffibeamer@dark` conditional will be switched on and off by the subsequently loaded color theme based on whether or not the given frame is being typeset in light or dark colors. This information will be used by outer themes to insert the correct logo into each frame.

```
174 \newif\iffibeamer@dark\fibeamer@darkfalse
```

A frame that is either title or dark, as specified by the value of the `\iffibeamer@dark` conditional, will have a gradient background as specified by the `fibeamer@dark@backgroundInner` and `fibeamer@light@backgroundOuter` colors that shall be defined by the subsequently loaded color theme.

A frame that is neither title nor dark, as specified by the value of the `\iffibeamer@dark` conditional, will have a gradient background as specified by the `fibeamer@light@backgroundInner` and `fibeamer@light@backgroundOuter` colors that shall be defined by the subsequently loaded color theme.

```

175 \defbeamertemplate*{background canvas}{fibeamer}{%
176   \ifthenelse{%
177     \boolean{fibeamer@dark} \OR \c@framenumber=0
178   }{%
179     \begin{tikzpicture}
180       \clip (0,\fibeamer@lengths@clipbottom) rectangle
181         (\paperwidth,\fibeamer@lengths@cliptop);
182       \path [inner color = fibeamer@dark@backgroundInner,
183             outer color = fibeamer@dark@backgroundOuter]
184         (0,0) rectangle (\paperwidth,\paperwidth);
185     \end{tikzpicture}
186   }{%
187     \begin{tikzpicture}
188       \clip (0,\fibeamer@lengths@clipbottom) rectangle
189         (\paperwidth,\fibeamer@lengths@cliptop);
190       \path [inner color = fibeamer@light@backgroundInner,
191             outer color = fibeamer@light@backgroundOuter]
192         (0,0) rectangle (\paperwidth,\paperwidth);
193     \end{tikzpicture}
194   }}}
```

The `\qed` symbol inserted at the end of proofs will have the same color as the rest of the proof.

```

195 \setbeamercolor{qed symbol}{%
196   use=block body,
197   fg=block body.fg,
198   bg=block body.bg}
```

The links can be colored by the subsequently loaded color themes.

```

199 \hypersetup{colorlinks,linkcolor=}
200 \mode
201 <all>
```

4.1.2 The theme/mu/beamerfontthemefibeamer-mu.sty file

This is the base font theme for presentations written at the Masaryk University in Brno. The theme has no effect outside the presentation mode.

```
202 \NeedsTeXFormat{LaTeX2e}
203 \ProvidesPackage{fibeamer/theme/mu/%
204   beamerfontthemefibeamer-mu}[2016/01/12]
205 \mode
206   \setbeamertemplate{normal text}{size=\normalsize}
207   \setbeamertemplate{title}{size=\LARGE, series=\bfseries}
208   \setbeamertemplate{subtitle}{parent=normal text, size=\Large}
209   \setbeamertemplate{frametitle}{size=\Large}
210   \setbeamertemplate{framesubtitle}{size=\large, shape=\itshape}
211   \setbeamertemplate{description item}{series=\bfseries}
212   \setbeamertemplate{author}{size=\large}
213 \mode
214 <all>
```

4.1.3 The theme/mu/beamerinnerthemefibeamer-mu.sty file

This is the base inner theme for presentations written at the Masaryk University in Brno. The theme has no effect outside the presentation mode.

```
215 \NeedsTeXFormat{LaTeX2e}
216 \ProvidesPackage{fibeamer/theme/mu/%
217   beamerinnerthemefibeamer-mu}[2016/01/14]
218 \mode
```

This part of the inner theme defines the design of lists.

```
219 \defbeamertemplate*{itemize item}{fibeamer}{$\bullet$}
220 \defbeamertemplate*{itemize subitem}{fibeamer}{---}
221 \defbeamertemplate*{itemize subsubitem}{fibeamer}{\guillemotright}
```

This part of the inner theme defines the design of bibliography items and citations.

```
222 \defbeamertemplate*{bibliography item}{fibeamer}{\insertbiblabel}
223 \AtBeginDocument{%
224   \let\fibeamer@oldcite\cite
225   \def\cite#1{%
226     \usebeamercolor[fg]{item}%
227     \fibeamer@oldcite{\#1}}}}
```

This part of the inner theme defines the design of the table of contents.

```
228 \defbeamertemplate*{section in toc}{fibeamer}{%
229   \usebeamercolor[fg]{item}%
230   \inserttocsectionnumber.%
231   \usebeamercolor[fg]{structure}%
232   \kern1.25ex\inserttocsection\par}
233 \defbeamertemplate*{subsection in toc}{fibeamer}{%
234   \hspace\leftmargini
235   \usebeamercolor[fg]{item}%
236   \inserttocsectionnumber.\inserttocsubsectionnumber%
```

```

237 \usebeamercolor[fg]{structure}%
238 \kern1.25ex\inserttocssubsection\par}
239 \defbeamertemplate*{subsubsection in toc}{fibeamer}{%
240 \hspace\leftmargini
241 \hspace\leftmarginii
242 \usebeamercolor[fg]{item}%
243 \inserttocsectionnumber.\inserttocsubsectionnumber.%
244 \inserttocsubsubsectionnumber%
245 \usebeamercolor[fg]{structure}%
246 \kern1.25ex\inserttocssubsection\par}
247 \mode
248 <all>

```

4.1.4 The theme/mu/beamerouterthemefibeamer-mu.sty file

This is the base outer theme for presentations written at the Masaryk University in Brno. The theme has no effect outside the presentation mode.

```

249 \NeedsTeXFormat{LaTeX2e}
250 \ProvidesPackage{fibeamer/theme/mu/%
251 beamerouterthemefibeamer-mu}[2016/01/12]
252 \mode

```

The theme uses the following packages:

- `ifthen` – This package is used to construct compound conditionals.
- `ifpdf` – This package is used to check, whether the document is being typeset in DVI mode. If it is, then the `\pdfpagewidth` and `\pdfpageheight` dimensions are defined, so that positioning in TikZ works correctly.
- `tikz` – This package is used to position the logo and the frame number on a frame.
- `pgfcore` – This package is used to draw the dashed line at the title frame.

```

253 \RequirePackage{ifthen}
254 \RequirePackage{ifpdf}
255 \ifpdf\else
256   \@ifundefined{pdfpagewidth}{\newdimen\pdfpagewidth}{}%
257   \@ifundefined{pdfpageheight}{\newdimen\pdfpageheight}{}%
258   \pdfpagewidth=\paperwidth
259   \pdfpageheight=\paperheight
260 \fi
261 \RequirePackage{tikz}
262 \RequirePackage{pgfcore}

```

This part of the outer theme defines the geometry of the frames along with other dimensions.

```

263 \newlength\fibeamer@lengths@baseunit
264 \fibeamer@lengths@baseunit=3.75mm
265 % The footer padding

```

```

266 \newlength\fibeamer@lengths@footerpad
267 \setlength\fibeamer@lengths@footerpad{%
268   \fibeamer@lengths@baseunit}
269 % The side margins
270 \newlength\fibeamer@lengths@margin
271 \setlength\fibeamer@lengths@margin{%
272   3\fibeamer@lengths@baseunit}
273 \setbeamersize{
274   text margin left=\fibeamer@lengths@margin,
275   text margin right=\fibeamer@lengths@margin}
276 % The upper margin
277 \newlength\fibeamer@lengths@titleline
278 \setlength\fibeamer@lengths@titleline{%
279   3\fibeamer@lengths@baseunit}
280 % The background clipping
281 \newlength\fibeamer@lengths@clipbottom
282 \setlength\fibeamer@lengths@clipbottom\paperwidth
283 \addtolength\fibeamer@lengths@clipbottom{-\paperheight}
284 \setlength\fibeamer@lengths@clipbottom{%
285   0.5\fibeamer@lengths@clipbottom}
286 \newlength\fibeamer@lengths@cliptop
287 \setlength\fibeamer@lengths@cliptop\paperwidth
288 \addtolength\fibeamer@lengths@cliptop{%
289   -\fibeamer@lengths@clipbottom}

290 % The logo size
291 \newlength\fibeamer@lengths@logowidth
292 \setlength\fibeamer@lengths@logowidth{%
293   14\fibeamer@lengths@baseunit}
294 \newlength\fibeamer@lengths@logoheight
295 \setlength\fibeamer@lengths@logoheight{%
296   0.4\fibeamer@lengths@logowidth}

```

The outer theme completely culls the bottom navigation.

```
297 \defbeamertemplate*{navigation symbols}{fibeamer}{}{}
```

The outer theme also culls the headline.

```
298 \defbeamertemplate*{headline}{fibeamer}{}{}
```

The frame title.

```

299 \defbeamertemplate*{frametitle}{fibeamer}{%
300   \vskip-1em % Align the text with the top border
301   \vskip\fibeamer@lengths@titleline
302   \usebeamercolor[fg]{frametitle}%
303   \usebeamertfont{frametitle}%
304   \insertframetitle\par%
305   \usebeamercolor[fg]{framesubtitle}%
306   \usebeamertfont{framesubtitle}%
307   \insertframesubtitle}

```

The footnote contains the frame number. It is flushed right.

```

308 \defbeamertemplate*{footline}{fibeamer}%
309   \ifnum\c@framenumber=0\else%
310     \begin{tikzpicture}[overlay]
311       \node[anchor=south east,
312             yshift=\fibeamer@lengths@footerpad,
313             xshift=-\fibeamer@lengths@footerpad] at
314         (current page.south east) {
315           \usebeamercolor[fg]{framenumber}%
316           \usebeamertfont{framenumber}%
317           \insertframenumber/\inserttotalframenumber};
318     \end{tikzpicture}
319   \fi}

```

The title frame contains the main logo, the `\title`, the `\subtitle`, and the `\author`.

```

320 \defbeamertemplate*{title page}{fibeamer}%
321   % This is slide 0
322   \setcounter{framenumber}{0}
323
324   % Input the university logo
325   \begin{tikzpicture}[
326     remember picture,
327     overlay,
328     xshift=0.5\fibeamer@lengths@logowidth,
329     yshift=0.5\fibeamer@lengths@logoheight
330   ]
331   \node at (0,0) {
332     \fibeamer@includeLogo[
333       width=\fibeamer@lengths@logowidth,
334       height=\fibeamer@lengths@logoheight
335     ];
336   \end{tikzpicture}
337
338   % Input the title
339   \usebeamertfont{title}%
340   \usebeamercolor[fg]{title}%
341   \begin{minipage}[b][2\baselineskip][b]{\textwidth}%
342     \raggedright\inserttitle
343   \end{minipage}
344   \vskip-.5\baselineskip
345
346   % Input the dashed line
347   \begin{pgfpicture}
348     \pgfsetlinewidth{2pt}
349     \pgfsetroundcap
350     \pgfsetdash{{0pt}{4pt}}{0cm}
351
352     \pgfpathmoveto{\pgfpoint{0mm}{0mm}}
353     \pgfpathlineto{\pgfpoint{\textwidth}{0mm}}
354
355     \pgfusepath{stroke}

```

```

356 \end{pgfpicture}
357 \vfill

358 % Input the subtitle
359 \usebeamertemplate{subtitle}%
360 \usebeamercolor[fg]{subtitle}%
361 \begin{minipage}{\textwidth}
362   \raggedright%
363   \insertsubtitle%
364 \end{minipage}\vskip.25\baselineskip
365
366 % Input the author's name
367 \usebeamertemplate{author}%
368 \usebeamercolor[fg]{author}%
369 \begin{minipage}{\textwidth}
370   \raggedright%
371   \insertauthor%
372 \end{minipage}}
373
374 \mode
375 <all>

```

4.2 The Faculty of Informatics

4.2.1 The theme/mu/beamercolorthemefibeamer-fi.sty file

This is the color theme for presentations written at the Faculty of Informatics at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```

376 \NeedsTeXFormat{LaTeX2e}
377 \ProvidesPackage{fibeamer/theme/mu/%
378   beamercolorthemefibeamer-mu-fi}[2016/06/16]
379 \mode

```

This color theme uses the combination of yellow and shades of gray. The fibeamer@{dark,light}@background{Inner,Outer} colors are used within the background canvas template, which is defined within the base color theme of the Masaryk University and which draws the gradient background of the frames.

```

380 \definecolor{fibeamer@black}{HTML}{2B2E34}
381 \definecolor{fibeamer@white}{HTML}{F3EEE1}
382 \definecolor{fibeamer@yellow}{HTML}{FFD564}
383 \definecolor{fibeamer@orange}{HTML}{FF5500}
384 \colorlet{fibeamer@lightGray}{white!80!fibeamer@black}
385 \colorlet{fibeamer@gray}{white!35!fibeamer@black}
386 \colorlet{fibeamer@darkGray}{white!20!fibeamer@black}
387 \definecolor{fibeamer@blue}{HTML}{3333B3}
388 \definecolor{fibeamer@lightRed}{HTML}{FF8E6B}
389 \colorlet{fibeamer@darkRed}{red!80!fibeamer@white}

390 %% Background gradients

```

```

391 \colorlet{fibeamer@dark@backgroundInner}{fbeamer@black}
392 \colorlet{fibeamer@dark@backgroundOuter}{fbeamer@black}
393 \colorlet{fbeamer@light@backgroundInner}{fbeamer@white}
394 \colorlet{fbeamer@light@backgroundOuter}{fbeamer@white}

```

The `darkframes` environment switches the `\iffibeamer@darktrue` conditional on and sets a dark color theme.

```

395 \renewenvironment{darkframes}{%
396   \begingroup
397     \fibeamer@darktrue
398     % Structures
399     \setbeamercolor*{frametitle}{fg=fibeamer@yellow}
400     \setbeamercolor*{framesubtitle}{fg=fibeamer@lightGray}
401     % Text
402     \setbeamercolor*{normal text}{fg=white, bg=fibeamer@black}
403     \setbeamercolor*{structure}{fg=white, bg=fibeamer@black}
404     \setbeamercolor*{alerted text}{fg=fibeamer@lightRed}
405     % Items, footnotes and links
406     \setbeamercolor*{item}{fg=fibeamer@yellow}
407     \setbeamercolor*{footnote mark}{fg=fibeamer@yellow}
408     \hypersetup{urlcolor=fibeamer@yellow}
409     % Blocks
410     \setbeamercolor*{block title}{%
411       fg=fibeamer@black, bg=fibeamer@yellow}
412     \setbeamercolor*{block title example}{%
413       fg=fibeamer@yellow, bg=fibeamer@darkGray}
414     \setbeamercolor*{block title alerted}{%
415       fg=fibeamer@black, bg=fibeamer@lightRed}
416     \setbeamercolor*{block body}{%
417       fg=fibeamer@white,
418       bg=fibeamer@darkGray}
419     \usebeamercolor*{normal text}
420     % Code listings
421     \lstset{%
422       commentstyle=\color{green!30!white},
423       keywordstyle=\color{blue!30!white},
424       stringstyle=\color{fbeamer@orange!30!white}}
425     }{%
426   \endgroup}

```

Outside the `darkframes` environment, the light theme is used.

```

427 %% Structures
428 \setbeamercolor{frametitle}{fg=fibeamer@blue}
429 \setbeamercolor{framesubtitle}{fg=fibeamer@gray}
430 %% Text
431 \setbeamercolor{normal text}{fg=fibeamer@black, bg=fibeamer@white}
432 \setbeamercolor{structure}{fg=fibeamer@black, bg=fibeamer@white}
433 \setbeamercolor{alerted text}{fg=red}

```

```

434 \addtobeamertemplate{block begin}{%
435   \iffbeamer@dark\else % alerted text in plain blocks at light slides
436     \setbeamercolor{alerted text}{fg=ffbeamer@darkRed}
437   \fi{}{}}

438 %% Items and links
439 \setbeamercolor{item}{fg=ffbeamer@blue}
440 \setbeamercolor{footnote mark}{fg=ffbeamer@blue}
441 \hypersetup{urlcolor=ffbeamer@blue}
442 %% Blocks
443 \setbeamercolor{block title}{%
444   fg=ffbeamer@black, bg=ffbeamer@yellow}
445 \setbeamercolor{block title example}{%
446   fg=ffbeamer@yellow, bg=ffbeamer@black}
447 \setbeamercolor{block title alerted}{%
448   fg=ffbeamer@white, bg=red}
449 \setbeamercolor{block body}{%
450   fg=ffbeamer@white, bg=ffbeamer@black}
451 %% Title
452 \setbeamercolor{title}{fg=ffbeamer@yellow, bg=ffbeamer@black}

453 \setbeamercolor{subtitle}{fg=ffbeamer@white, bg=ffbeamer@black}
454 \setbeamercolor{author}{fg=ffbeamer@lightGray, bg=ffbeamer@black}
455 % Code listings
456 \lstset{%
457   basicstyle=\footnotesize\ttfamily,
458   breakatwhitespace=false,
459   breaklines=true,
460   commentstyle=\color{green!60!black},
461   extendedchars=true,
462   keywordstyle=\color{fbeamer@blue},
463   showspaces=false,
464   showstringspaces=false,
465   showtabs=false,
466   stringstyle=\color{violet}}
467 \mode
468 <all>

```

4.3 The Faculty of Science

4.3.1 The theme/mu/beamercolorthemeffbeamer-sci.sty file

This is the color theme for presentations written at the Faculty of Science at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```

469 \NeedsTeXFormat{LaTeX2e}
470 \ProvidesPackage{fbeamer/theme/mu/%
471   beamercolorthemeffbeamer-mu-sci}[2016/05/06]
472 \mode<presentation>

```

This color theme uses the combination of yellow and shades of gray. The `fibeamer@{dark,light}@background{Inner,Outer}` colors are used within the background canvas template, which is defined within the base color theme of the Masaryk University and which draws the gradient background of the frames.

```

473 \definecolor{fibeamer@black}{HTML}{000000}
474 \definecolor{fibeamer@white}{HTML}{FFFFFF}
475 \definecolor{fibeamer@green}{HTML}{139632}
476 \definecolor{fibeamer@gray}{HTML}{999999}
477 \colorlet{fibeamer@lightGreen}{fibeamer@green!30!fibeamer@white}
478 \colorlet{fibeamer@darkGreen}{fibeamer@green!60!fibeamer@black}
479 \definecolor{fibeamer@lightOrange}{HTML}{FFA25E}
480 \colorlet{fibeamer@orange}{fibeamer@lightOrange!80!fibeamer@darkGreen}

481 %% Background gradients
482 \colorlet{fibeamer@dark@backgroundInner}{fibeamer@darkGreen}
483 \colorlet{fibeamer@dark@backgroundOuter}{fibeamer@darkGreen}
484 \colorlet{fibeamer@light@backgroundInner}{fibeamer@white}
485 \colorlet{fibeamer@light@backgroundOuter}{fibeamer@white}

```

The `darkframes` environment switches the `\iffibeamer@dark\true` conditional on and sets a dark color theme.

```

486 \renewenvironment{darkframes}{%
487     \begingroup
488     \fibeamer@dark\true
489     %% Structures
490     \setbeamercolor*{frametitle}{fg=fibeamer@lightGreen}
491     \setbeamercolor*{framesubtitle}{fg=fibeamer@white}
492     %% Text
493     \setbeamercolor*{normal text}{fg=fibeamer@white, bg=fibeamer@green}
494     \setbeamercolor*{structure}{fg=fibeamer@white, bg=fibeamer@green}

495     \setbeamercolor*{alerted text}{%
496         fg=fibeamer@lightOrange}

497     %% Items, footnotes and links
498     \setbeamercolor*{item}{fg=fibeamer@lightGreen}
499     \setbeamercolor*{footnote mark}{fg=fibeamer@lightGreen}
500     \hypersetup{urlcolor=fibeamer@lightGreen}
501     %% Blocks
502     \setbeamercolor*{block title}{%
503         fg=fibeamer@white, bg=fibeamer@green!60!fibeamer@white}
504     \setbeamercolor*{block title example}{%
505         fg=fibeamer@white, bg=fibeamer@green!60!fibeamer@white}
506     \setbeamercolor*{block title alerted}{%
507         fg=fibeamer@darkGreen, bg=fibeamer@lightOrange}
508     \setbeamercolor*{block body}{%
509         fg=fibeamer@green,
510         bg=fibeamer@gray!15!fibeamer@white}
511     \usebeamercolor*{normal text}
512     % Code listings

```

```

513     \lstset{%
514         commentstyle=\color{green!30!fibeamer@white},
515         keywordstyle=\color{blue!30!fibeamer@white},
516         stringstyle=\color{red!30!fibeamer@white}}
517     }{%
518     \endgroup}

```

Outside the `darkframes` environment, the light theme is used.

```

519 %% Structures
520 \setbeamercolor{frametitle}{fg=fibeamer@green}
521 \setbeamercolor{framesubtitle}{fg=fibeamer@black!75!fibeamer@white}
522 %% Text
523 \setbeamercolor{normal text}{fg=fibeamer@black, bg=fibeamer@white}
524 \setbeamercolor{structure}{fg=fibeamer@black, bg=fibeamer@white}

525 \setbeamercolor{alerted text}{fg=red}
526 \addtobeamertemplate{block begin}{%
527     \iffibeamer@dark % alerted text in plain block at dark slides
528         \setbeamercolor{alerted text}{fg=fibeamer@orange}%
529     \fi{}}

530 %% Items, footnotes and links
531 \setbeamercolor*{item}{fg=fibeamer@green}
532 \setbeamercolor*{footnote mark}{fg=fibeamer@green}
533 \hypersetup{urlcolor=fibeamer@green}
534 %% Blocks
535 \setbeamercolor{block title}{%
536     fg=fibeamer@white, bg=fibeamer@green}
537 \setbeamercolor{block title example}{%
538     fg=fibeamer@white, bg=fibeamer@green}
539 \setbeamercolor{block title alerted}{%
540     fg=fibeamer@white, bg=red}
541 \setbeamercolor{block body}{%
542     fg=fibeamer@green, bg=fibeamer@gray!20!fibeamer@white}
543 %% Title
544 \setbeamercolor{title}{fg=fibeamer@white, bg=fibeamer@green}
545 % Code listings
546 \lstset{%
547     basicstyle=\footnotesize\ttfamily,
548     breakatwhitespace=false,
549     breaklines=true,
550     commentstyle=\color{green!60!fibeamer@black},
551     extendedchars=true,
552     keywordstyle=\color{blue},
553     showspaces=false,
554     showstringspaces=false,
555     showtabs=false,
556     stringstyle=\color{violet}}}
557 \mode
558 <all>

```

4.4 The Faculty of Arts

4.4.1 The theme/mu/beamercolorthemefibeamer-phil.sty file

This is the color theme for presentations written at the Faculty of Arts at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```
559 \NeedsTeXFormat{LaTeX2e}
560 \ProvidesPackage{fibeamer/theme/mu/%
561   beamercolorthemefibeamer-mu-phil}[2016/05/06]
562 \mode
```

This color theme uses the combination of yellow and shades of gray. The `fibeamer@{dark,light}@background{Inner,Outer}` colors are used within the background canvas template, which is defined within the base color theme of the Masaryk University and which draws the gradient background of the frames.

```
563 \definecolor{fibeamer@black}{HTML}{000000}
564 \definecolor{fibeamer@white}{HTML}{FFFFFF}
565 \definecolor{fibeamer@blue}{HTML}{0071B2}
566 \colorlet{fibeamer@lightBlue}{fibeamer@blue!30!fibeamer@white}
567 \colorlet{fibeamer@darkBlue}{fibeamer@blue!60!fibeamer@black}
568 \definecolor{fibeamer@gray}{HTML}{999999}
569 \definecolor{fibeamer@lightOrange}{HTML}{FFA25E}
570 \colorlet{fibeamer@orange}{fibeamer@lightOrange!80!fibeamer@darkBlue}

571 %% Background gradients
572 \colorlet{fibeamer@dark@backgroundInner}{fibeamer@darkBlue}
573 \colorlet{fibeamer@dark@backgroundOuter}{fibeamer@darkBlue}
574 \colorlet{fibeamer@light@backgroundInner}{fibeamer@white}
575 \colorlet{fibeamer@light@backgroundOuter}{fibeamer@white}
```

The `darkframes` environment switches the `\iffibeamer@darktrue` conditional on and sets a dark color theme.

```
576 \renewenvironment{darkframes}{%
577   \begingroup
578     \fibeamer@darktrue
579     % Structures
580     \setbeamercolor*{frametitle}{fg=fibeamer@lightBlue}
581     \setbeamercolor*{framesubtitle}{fg=fibeamer@white}
582     % Text
583     \setbeamercolor*{normal text}{fg=fibeamer@white, bg=fibeamer@blue}
584     \setbeamercolor*{structure}{fg=fibeamer@white, bg=fibeamer@blue}

585     \setbeamercolor*{alerted text}{fg=fibeamer@lightOrange}

586     % Items, footnotes and links
587     \setbeamercolor*{item}{fg=fibeamer@lightBlue}
588     \setbeamercolor*{footnote mark}{fg=fibeamer@lightBlue}
589     \hypersetup{urlcolor=fibeamer@lightBlue}
590     % Blocks
591     \setbeamercolor*{block title}{%
```

```

592     fg=fibeamer@white, bg=fibeamer@blue!60!fibeamer@white}
593 \setbeamercolor*{block title example}{%
594   fg=fibeamer@white, bg=fibeamer@blue!60!fibeamer@white}
595 \setbeamercolor*{block title alerted}{%
596   fg=fibeamer@darkBlue, bg=fibeamer@lightOrange}
597 \setbeamercolor*{block body}{%
598   fg=fibeamer@blue,
599   bg=fibeamer@gray!15!fibeamer@white}
600 \usebeamercolor*{normal text}
601 % Code listings
602 \lstset{%
603   commentstyle=\color{green!30!fibeamer@white},
604   keywordstyle=\color{fibeamer@lightBlue},
605   stringstyle=\color{red!30!fibeamer@white}}
606 }{%
607 \endgroup}

```

Outside the darkframes environment, the light theme is used.

```

608 %% Structures
609 \setbeamercolor{frametitle}{fg=fibeamer@blue}
610 \setbeamercolor{framesubtitle}{fg=fibeamer@black!75!fibeamer@white}
611 %% Text
612 \setbeamercolor{normal text}{fg=fibeamer@black, bg=fibeamer@white}
613 \setbeamercolor{structure}{fg=fibeamer@black, bg=fibeamer@white}

614 \setbeamercolor{alerted text}{fg=red}
615 \addtobeamertemplate{block begin}{%
616   \iffibeamer@dark % alerted text in plain block at dark slides
617   \setbeamercolor{alerted text}{fg=fibeamer@orange}%
618 }{fi}{}

619 %% Items, footnotes and links
620 \setbeamercolor*{item}{fg=fibeamer@blue}
621 \setbeamercolor*{footnote mark}{fg=fibeamer@blue}
622 \hypersetup{urlcolor=fibeamer@blue}
623 %% Blocks
624 \setbeamercolor{block title}{%
625   fg=fibeamer@white, bg=fibeamer@blue}
626 \setbeamercolor{block title example}{%
627   fg=fibeamer@white, bg=fibeamer@blue}
628 \setbeamercolor{block title alerted}{%
629   fg=fibeamer@white, bg=red}
630 \setbeamercolor{block body}{%
631   fg=fibeamer@blue, bg=fibeamer@gray!20!fibeamer@white}
632 %% Title
633 \setbeamercolor{title}{fg=fibeamer@white, bg=fibeamer@blue}
634 % Code listings
635 \lstset{%
636   basicstyle=\footnotesize\ttfamily,
637   breakatwhitespace=false,
638   breaklines=true,

```

```

639     commentstyle=\color{green!60!fibeamer@black},
640     extendedchars=true,
641     keywordstyle=\color{fibeamer@blue},
642     showspaces=false,
643     showstringspaces=false,
644     showtabs=false,
645     stringstyle=\color{violet}}
646 \mode
647 <all>

```

4.5 The Faculty of Education

4.5.1 The theme/mu/beamercolorthemefibeamer-ped.sty file

This is the color theme for presentations written at the Faculty of Education at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```

648 \NeedsTeXFormat{LaTeX2e}
649 \ProvidesPackage{fbeamer/theme/mu/%
650   beamercolorthemefibeamer-mu-ped}[2016/05/06]
651 \mode

```

This color theme uses the combination of yellow and shades of gray. The fibeamer@{dark, light}@background{Inner, Outer} colors are used within the background canvas template, which is defined within the base color theme of the Masaryk University and which draws the gradient background of the frames.

```

652 \definecolor{fbeamer@black}{HTML}{2B2E34}
653 \definecolor{fbeamer@white}{HTML}{FFFFFF}
654 \definecolor{fbeamer@lightOrange}{HTML}{FFA25E}
655 \definecolor{fbeamer@orange}{HTML}{FF5500}
656 \colorlet{fbeamer@lightGray}{white!80!fbeamer@black}
657 \colorlet{fbeamer@gray}{white!35!fbeamer@black}
658 \colorlet{fbeamer@darkGray}{white!20!fbeamer@black}
659 \colorlet{fbeamer@blue}{blue!60!fbeamer@lightGray}
660 \colorlet{fbeamer@darkRed}{red!80!fbeamer@white}
661 \definecolor{fbeamer@lightRed}{HTML}{FF8B8B}

662 %% Background gradients
663 \colorlet{fbeamer@dark@backgroundInner}{fbeamer@black}
664 \colorlet{fbeamer@dark@backgroundOuter}{fbeamer@black}
665 \colorlet{fbeamer@light@backgroundInner}{fbeamer@white}
666 \colorlet{fbeamer@light@backgroundOuter}{fbeamer@white}

```

The darkframes environment switches the \ifffbeamer@darktrue conditional on and sets a dark color theme.

```

667 \renewenvironment{darkframes}{%
668   \begingroup
669     \fibeamer@darktrue
670     % Structures
671     \setbeamercolor*{frametitle}{fg=fibeamer@lightOrange}

```

```

672 \setbeamercolor*{framesubtitle}{fg=fibeamer@lightGray}
673 %% Text
674 \setbeamercolor*{normal text}{fg=white, bg=fibeamer@black}
675 \setbeamercolor*{structure}{fg=white, bg=fibeamer@black}

676 \setbeamercolor*{alerted text}{fg=fibeamer@lightRed}

677 %% Items, footnotes and links
678 \setbeamercolor*{item}{fg=fibeamer@lightOrange}
679 \setbeamercolor*{footnote mark}{fg=fibeamer@lightOrange}
680 \hypersetup{urlcolor=fibeamer@lightOrange}
681 %% Blocks
682 \setbeamercolor*{block title}{%
683   fg=fibeamer@black, bg=fibeamer@lightOrange}
684 \setbeamercolor*{block title example}{%
685   fg=fibeamer@lightOrange, bg=fibeamer@darkGray}
686 \setbeamercolor*{block title alerted}{%
687   fg=fibeamer@black, bg=fibeamer@lightRed}
688 \setbeamercolor*{block body}{%
689   fg=fibeamer@white,
690   bg=fibeamer@darkGray}
691 \usebeamercolor*{normal text}
692 % Code listings
693 \lstset{%
694   commentstyle=\color{green!30!white},
695   keywordstyle=\color{blue!30!white},
696   stringstyle=\color{fibeamer@orange!30!white}}
697 }{%
698 \endgroup}

```

Outside the darkframes environment, the light theme is used.

```

699 %% Structures
700 \setbeamercolor{frametitle}{fg=fibeamer@black}
701 \setbeamercolor{framesubtitle}{fg=fibeamer@gray}
702 %% Text
703 \setbeamercolor{normal text}{fg=fibeamer@black, bg=fibeamer@white}
704 \setbeamercolor{structure}{fg=fibeamer@black, bg=fibeamer@white}

705 \setbeamercolor{alerted text}{fg=red}
706 \addtobeamertemplate{block begin}{%
707   \iffibeamer@dark\else % alerted text in plain blocks at light slides
708     \setbeamercolor{alerted text}{fg=fibeamer@darkRed}
709   \fi{}}

710 %% Items, footnotes and links
711 \setbeamercolor*{item}{fg=fibeamer@orange}
712 \setbeamercolor*{footnote mark}{fg=fibeamer@orange}
713 \hypersetup{urlcolor=fibeamer@blue}
714 %% Blocks
715 \setbeamercolor{block title}{%
716   fg=fibeamer@black, bg=fibeamer@lightOrange}

```

```

717 \setbeamercolor{block title example}{%
718   fg=fibeamer@lightOrange, bg=fibeamer@black}
719 \setbeamercolor{block title alerted}{%
720   fg=fibeamer@white, bg=red}
721 \setbeamercolor{block body}{%
722   fg=white, bg=fibeamer@black}
723 %% Title
724 \setbeamercolor{title}{fg=fibeamer@lightOrange, bg=fibeamer@black}

725 \setbeamercolor{subtitle}{fg=fibeamer@white, bg=fibeamer@black}
726 \setbeamercolor{author}{fg=fibeamer@lightGray, bg=fibeamer@black}
727 % Code listings
728 \lstset{%
729   basicstyle=\footnotesize\ttfamily,
730   breakatwhitespace=false,
731   breaklines=true,
732   commentstyle=\color{green!60!black},
733   extendedchars=true,
734   keywordstyle=\color{fibeamer@blue},
735   showspaces=false,
736   showstringspaces=false,
737   showtabs=false,
738   stringstyle=\color{violet}}
739 \mode
740 <all>

```

4.6 The Faculty of Social Studies

4.6.1 The `theme/mu/beamercolorthemefibeamer-fss.sty` file

This is the color theme for presentations written at the Faculty of Social Studies at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```

741 \NeedsTeXFormat{LaTeXe}
742 \ProvidesPackage{fibeamer/theme/mu/%
743   beamercolorthemefibeamer-mu-fss}[2016/05/06]
744 \mode

```

This color theme uses the combination of yellow and shades of gray. The `fibeamer@{dark,light}@background{Inner,Outer}` colors are used within the background canvas template, which is defined within the base color theme of the Masaryk University and which draws the gradient background of the frames.

```

745 \definecolor{fibeamer@black}{HTML}{000000}
746 \definecolor{fibeamer@white}{HTML}{FFFFFF}
747 \definecolor{fibeamer@cyan}{HTML}{00796E}
748 \colorlet{fibeamer@darkCyan}{fibeamer@cyan!70!fibeamer@black}
749 \colorlet{fibeamer@lightCyan}{fibeamer@cyan!30!fibeamer@white}
750 \definecolor{fibeamer@gray}{HTML}{999999}
751 \definecolor{fibeamer@lightOrange}{HTML}{FFA25E}
752 \colorlet{fibeamer@orange}{fibeamer@lightOrange!80!fibeamer@darkCyan}

```

```

753  %% Background gradients
754  \colorlet{fibeamer@dark@backgroundInner}{fbeamer@darkCyan}
755  \colorlet{fbeamer@dark@backgroundOuter}{fbeamer@darkCyan}
756  \colorlet{fbeamer@light@backgroundInner}{fbeamer@white}
757  \colorlet{fbeamer@light@backgroundOuter}{fbeamer@white}

```

The `darkframes` environment switches the `\ifffbeamer@darktrue` conditional on and sets a dark color theme.

```

758  \renewenvironment{darkframes}{%
759      \begingroup
760          \fibeamer@darktrue
761          % Structures
762          \setbeamercolor*{frametitle}{fg=fibeamer@lightCyan}
763          \setbeamercolor*{framesubtitle}{fg=fibeamer@white}
764          % Text
765          \setbeamercolor*{normal text}{fg=fibeamer@white, bg=fibeamer@cyan}
766          \setbeamercolor*{structure}{fg=fibeamer@white, bg=fibeamer@cyan}
767
768          % Items, footnotes and links
769          \setbeamercolor{item}{fg=fibeamer@lightCyan}
770          \setbeamercolor{footnote mark}{fg=fibeamer@lightCyan}
771          \hypersetup{urlcolor=fibeamer@lightCyan}
772          % Blocks
773          \setbeamercolor*{block title}{%
774              fg=fibeamer@white, bg=fibeamer@cyan!60!fbeamer@white}
775          \setbeamercolor*{block title example}{%
776              fg=fibeamer@white, bg=fibeamer@cyan!60!fbeamer@white}
777          \setbeamercolor*{block title alerted}{%
778              fg=fibeamer@darkCyan, bg=fibeamer@lightOrange}
779          \setbeamercolor*{block body}{%
780              fg=fibeamer@cyan,
781              bg=fibeamer@gray!15!fbeamer@white}
782          \usebeamercolor*{normal text}
783          % Code listings
784          \lstset{%
785              commentstyle=\color{green!30!fbeamer@white},
786              keywordstyle=\color{blue!30!fbeamer@white},
787              stringstyle=\color{red!30!fbeamer@white}}
788          }{%
789      \endgroup}

```

Outside the `darkframes` environment, the light theme is used.

```

790  %% Structures
791  \setbeamercolor{frametitle}{fg=fibeamer@cyan}
792  \setbeamercolor{framesubtitle}{fg=fibeamer@black!75!fbeamer@white}
793  %% Text
794  \setbeamercolor{normal text}{fg=fibeamer@black, bg=fibeamer@white}
795  \setbeamercolor{structure}{fg=fibeamer@black, bg=fibeamer@white}

```

```

796 \setbeamercolor{alerted text}{fg=red}
797 \addtobeamertemplate{block begin}{%
798   \ifibeamer@dark % alerted text in plain block at dark slides
799     \setbeamercolor{alerted text}{fg=fibeamer@orange}%
800   \fi{}}
801 %% Items, footnotes and links
802 \setbeamercolor{item}{fg=fibeamer@cyan}
803 \setbeamercolor{footnote mark}{fg=fibeamer@cyan}
804 \hypersetup{urlcolor=fibeamer@cyan}
805 %% Blocks
806 \setbeamercolor{block title}{%
807   fg=fibeamer@white, bg=fibeamer@cyan}
808 \setbeamercolor{block title example}{%
809   fg=fibeamer@white, bg=fibeamer@cyan}
810 \setbeamercolor{block title alerted}{%
811   fg=fibeamer@white, bg=red}
812 \setbeamercolor{block body}{%
813   fg=fibeamer@cyan, bg=fibeamer@gray!20!fibeamer@white}
814 %% Title
815 \setbeamercolor{title}{fg=fibeamer@white, bg=fibeamer@cyan}
816 % Code listings
817 \lstset{%
818   basicstyle=\footnotesize\ttfamily,
819   breakatwhitespace=false,
820   breaklines=true,
821   commentstyle=\color{green!60!fibeamer@black},
822   extendedchars=true,
823   keywordstyle=\color{blue},
824   showspaces=false,
825   showstringspaces=false,
826   showtabs=false,
827   stringstyle=\color{violet}}
828 \mode
829 <all>

```

4.7 The Faculty of Law

4.7.1 The theme/mu/beamercolorthemefibeamer-law.sty file

This is the color theme for presentations written at the Faculty of Law at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```

830 \NeedsTeXFormat{LaTeX2e}
831 \ProvidesPackage{fibeamer/theme/mu/%
832   beamercolorthemefibeamer-mu-law}[2016/05/06]
833 \mode

```

This color theme uses the combination of yellow and shades of gray. The `fibeamer@{dark,light}@background{Inner,Outer}` colors are used within the

background canvas template, which is defined within the base color theme of the Masaryk University and which draws the gradient background of the frames.

```

834 \definecolor{fibeamer@black}{HTML}{000000}
835 \definecolor{fibeamer@white}{HTML}{FFFFFF}
836 \definecolor{fibeamer@violet}{HTML}{732889}
837 \colorlet{fibeamer@darkViolet}{fibeamer@violet!70!fibeamer@black}
838 \colorlet{fibeamer@lightViolet}{fibeamer@violet!30!fibeamer@white}
839 \definecolor{fibeamer@gray}{HTML}{999999}
840 \definecolor{fibeamer@lightOrange}{HTML}{FFA25E}
841 \colorlet{fibeamer@orange}{fibeamer@lightOrange!80!fibeamer@darkViolet}

842 %% Background gradients
843 \colorlet{fibeamer@dark@backgroundInner}{fibeamer@darkViolet}
844 \colorlet{fibeamer@dark@backgroundOuter}{fibeamer@darkViolet}
845 \colorlet{fibeamer@light@backgroundInner}{fibeamer@white}
846 \colorlet{fibeamer@light@backgroundOuter}{fibeamer@white}

```

The `darkframes` environment switches the `\iffifeamer@darktrue` conditional on and sets a dark color theme.

```

847 \renewenvironment{darkframes}{%
848   \begingroup
849     \fibeamer@darktrue
850     % Structures
851     \setbeamercolor*{frametitle}{fg=fibeamer@lightViolet}
852     \setbeamercolor*{framesubtitle}{fg=fibeamer@white}
853     % Text
854     \setbeamercolor*{normal text}{fg=fibeamer@white, bg=fibeamer@violet}
855     \setbeamercolor*{structure}{fg=fibeamer@white, bg=fibeamer@violet}

856     \setbeamercolor*{alerted text}{fg=fibeamer@lightOrange}

857     % Items, footnotes and links
858     \setbeamercolor*{item}{fg=fibeamer@lightViolet}
859     \setbeamercolor*{footnote mark}{fg=fibeamer@lightViolet}
860     \hypersetup{urlcolor=fibeamer@lightViolet}
861     % Blocks
862     \setbeamercolor*{block title}{%
863       fg=fibeamer@white, bg=fibeamer@violet!60!fibeamer@white}
864     \setbeamercolor*{block title example}{%
865       fg=fibeamer@white, bg=fibeamer@violet!60!fibeamer@white}
866     \setbeamercolor*{block title alerted}{%
867       fg=fibeamer@darkViolet, bg=fibeamer@lightOrange}
868     \setbeamercolor*{block body}{%
869       fg=fibeamer@violet,
870       bg=fibeamer@gray!15!fibeamer@white}
871     \usebeamercolor*{normal text}
872     % Code listings
873     \lstset{%
874       commentstyle=\color{green!30!fibeamer@white},
875       keywordstyle=\color{blue!30!fibeamer@white},

```

```

876         stringstyle=\color{fibeamer@lightViolet}}
877     }{%
878     \endgroup}
879 %% Structures
880 \setbeamercolor{frametitle}{fg=fibeamer@violet}
881 \setbeamercolor{framesubtitle}{fg=fibeamer@black!75!fibeamer@white}
882 %% Text
883 \setbeamercolor{normal text}{fg=fibeamer@black, bg=fibeamer@white}
884 \setbeamercolor{structure}{fg=fibeamer@black, bg=fibeamer@white}

885 \setbeamercolor{alerted text}{fg=red}
886 \addtobeamertemplate{block begin}{%
887     \iffffbeamer@dark % alerted text in plain block at dark slides
888         \setbeamercolor{alerted text}{fg=fibeamer@orange}%
889     \fi{}}

890 %% Items, footnotes and links
891 \setbeamercolor{item}{fg=fibeamer@violet}
892 \setbeamercolor{footnote mark}{fg=fibeamer@violet}
893 \hypersetup{urlcolor=fibeamer@violet}
894 %% Blocks
895 \setbeamercolor{block title}{%
896     fg=fibeamer@white, bg=fibeamer@violet}
897 \setbeamercolor{block title example}{%
898     fg=fibeamer@white, bg=fibeamer@violet}
899 \setbeamercolor{block title alerted}{%
900     fg=fibeamer@white, bg=red}
901 \setbeamercolor{block body}{%
902     fg=fibeamer@violet, bg=fibeamer@gray!20!fibeamer@white}
903 %% Title
904 \setbeamercolor{title}{fg=fibeamer@white, bg=fibeamer@violet}
905 % Code listings
906 \lstset{%
907     basicstyle=\footnotesize\ttfamily,
908     breakatwhitespace=false,
909     breaklines=true,
910     commentstyle=\color{green!60!fibeamer@black},
911     extendedchars=true,
912     keywordstyle=\color{blue},
913     showspaces=false,
914     showstringspaces=false,
915     showtabs=false,
916     stringstyle=\color{violet}}}
917 \mode
918 <all>

```

4.8 The Faculty of Economics and Administration

4.8.1 The theme/mu/beamercolorthemefibeamer-econ.sty file

This is the color theme for presentations written at the Faculty of Economics and Administration at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```
919 \NeedsTeXFormat{LaTeX2e}
920 \ProvidesPackage{fibeamer/theme/mu/%
921   beamercolorthemefibeamer-mu-econ}[2016/05/06]
922 \mode
```

This color theme uses the combination of yellow and shades of gray. The fibeamer@{dark,light}@background{Inner,Outer} colors are used within the background canvas template, which is defined within the base color theme of the Masaryk University and which draws the gradient background of the frames.

```
923 \definecolor{fibeamer@black}{HTML}{2B2E34}
924 \definecolor{fibeamer@white}{HTML}{FFFFFF}
925 \definecolor{fibeamer@brown}{HTML}{892840}
926 \colorlet{fibeamer@lightBrown}{fibeamer@brown!30!fibeamer@white}
927 \colorlet{fibeamer@darkBrown}{fibeamer@brown!60!fibeamer@black}
928 \definecolor{fibeamer@gray}{HTML}{999999}
929 \definecolor{fibeamer@lightOrange}{HTML}{FFA25E}
930 \colorlet{fibeamer@orange}{fibeamer@lightOrange!80!fibeamer@darkBrown}

931 %% Background gradients
932 \colorlet{fibeamer@dark@backgroundInner}{fibeamer@darkBrown}
933 \colorlet{fibeamer@dark@backgroundOuter}{fibeamer@darkBrown}
934 \colorlet{fibeamer@light@backgroundInner}{fibeamer@white}
935 \colorlet{fibeamer@light@backgroundOuter}{fibeamer@white}
```

The darkframes environment switches the \iffibeamer@darktrue conditional on and sets a dark color theme.

```
936 \renewenvironment{darkframes}{%
937   \begingroup
938   \ifbeamer@darktrue
939     % Structures
940     \setbeamercolor*{frametitle}{fg=fibeamer@brown!30!fibeamer@white}
941     \setbeamercolor*{framesubtitle}{fg=fibeamer@white}
942     % Text
943     \setbeamercolor*{normal text}{fg=fibeamer@white, bg=fibeamer@brown}
944     \setbeamercolor*{structure}{fg=fibeamer@white, bg=fibeamer@brown}

945     \setbeamercolor*{alerted text}{fg=fibeamer@lightOrange}

946     % Items, footnotes and links
947     \setbeamercolor*{item}{fg=fibeamer@lightBrown}
948     \setbeamercolor*{footnote mark}{fg=fibeamer@lightBrown}
949     \hypersetup{urlcolor=fibeamer@lightBrown}
950     % Blocks
951     \setbeamercolor*{block title}{%
```

```

952     fg=fibeamer@white, bg=fibeamer@brown!60!fibeamer@white}
953 \setbeamercolor*{block title example}{%
954     fg=fibeamer@white, bg=fibeamer@brown!60!fibeamer@white}
955 \setbeamercolor*{block title alerted}{%
956     fg=fibeamer@darkBrown, bg=fibeamer@lightOrange}
957 \setbeamercolor*{block body}{%
958     fg=fibeamer@brown,
959     bg=fibeamer@gray!15!fibeamer@white}
960 \usebeamercolor*{normal text}
961 % Code listings
962 \lstset{%
963     commentstyle=\color{green!30!fibeamer@white},
964     keywordstyle=\color{blue!30!fibeamer@white},
965     stringstyle=\color{fibeamer@brown!30!fibeamer@white}}
966 }{%
967 \endgroup}

```

Outside the `darkframes` environment, the light theme is used.

```

968 %% Structures
969 \setbeamercolor{frametitle}{fg=fibeamer@brown}
970 \setbeamercolor{framesubtitle}{fg=fibeamer@black!75!fibeamer@white}
971 %% Text
972 \setbeamercolor{normal text}{fg=fibeamer@black, bg=fibeamer@white}
973 \setbeamercolor{structure}{fg=fibeamer@black, bg=fibeamer@white}

974 \setbeamercolor{alerted text}{fg=red}
975 \addtobeamertemplate{block begin}{%
976     \iffibeamer@dark % alerted text in plain block at dark slides
977         \setbeamercolor{alerted text}{fg=fibeamer@orange}%
978     \fi{}}

979 %% Items, footnotes and links
980 \setbeamercolor{item}{fg=fibeamer@brown}
981 \setbeamercolor{footnote mark}{fg=fibeamer@brown}
982 \hypersetup{urlcolor=fibeamer@brown}
983 %% Blocks
984 \setbeamercolor{block title}{%
985     fg=fibeamer@white, bg=fibeamer@brown}
986 \setbeamercolor{block title example}{%
987     fg=fibeamer@white, bg=fibeamer@brown}
988 \setbeamercolor{block title alerted}{%
989     fg=fibeamer@white, bg=red}
990 \setbeamercolor{block body}{%
991     fg=fibeamer@brown, bg=fibeamer@gray!20!fibeamer@white}
992 %% Title
993 \setbeamercolor{title}{fg=fibeamer@white, bg=fibeamer@brown}
994 % Code listings
995 \lstset{%
996     basicstyle=\footnotesize\ttfamily,
997     breakatwhitespace=false,
998     breaklines=true,

```

```

999     commentstyle=\color{green!60!fibeamer@black},
1000    extendedchars=true,
1001    keywordstyle=\color{blue},
1002    showspaces=false,
1003    showstringspaces=false,
1004    showtabs=false,
1005    stringstyle=\color{violet}}
1006 \mode
1007 <all>

```

4.9 The Faculty of Medicine

4.9.1 The theme/mu/beamercolorthemefibeamer-med.sty file

This is the color theme for presentations written at the Faculty of Medicine at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```

1008 \NeedsTeXFormat{LaTeX2e}
1009 \ProvidesPackage{fbeamer/theme/mu/%
1010   beamercolorthemefibeamer-mu-med}[2016/05/06]
1011 \mode

```

This color theme uses the combination of yellow and shades of gray. The fibeamer@{dark, light}@background{Inner, Outer} colors are used within the background canvas template, which is defined within the base color theme of the Masaryk University and which draws the gradient background of the frames.

```

1012 \definecolor{fbeamer@black}{HTML}{000000}
1013 \definecolor{fbeamer@white}{HTML}{FFFFFF}
1014 \definecolor{fbeamer@red}{HTML}{c82600}
1015 \colorlet{fbeamer@lightRed}{fbeamer@red!30!fbeamer@white}
1016 \colorlet{fbeamer@darkRed}{fbeamer@red!60!fbeamer@black}
1017 \definecolor{fbeamer@gray}{HTML}{999999}
1018 \definecolor{fbeamer@lightOrange}{HTML}{FFA25E}
1019 \colorlet{fbeamer@orange}{fbeamer@lightOrange!80!fbeamer@darkRed}

1020 %% Background gradients
1021 \colorlet{fbeamer@dark@backgroundInner}{fbeamer@darkRed}
1022 \colorlet{fbeamer@dark@backgroundOuter}{fbeamer@darkRed}
1023 \colorlet{fbeamer@light@backgroundInner}{fbeamer@white}
1024 \colorlet{fbeamer@light@backgroundOuter}{fbeamer@white}

```

The darkframes environment switches the \ifffbeamer@darktrue conditional on and sets a dark color theme.

```

1025 \renewenvironment{darkframes}{%
1026   \begingroup
1027     \fibeamer@darktrue
1028     %% Structures
1029     \setbeamercolor*{frametitle}{fg=fibeamer@lightRed}
1030     \setbeamercolor*{framesubtitle}{fg=fibeamer@white}
1031     %% Text

```

```

1032 \setbeamercolor*{normal text}{fg=fibeamer@white, bg=fibeamer@red}
1033 \setbeamercolor*{structure}{fg=fibeamer@white, bg=fibeamer@red}
1034 \setbeamercolor*{alerted text}{fg=fibeamer@lightOrange}

1035 %% Items, footnotes and links
1036 \setbeamercolor*{item}{fg=fibeamer@lightRed}
1037 \setbeamercolor*{footnote mark}{fg=fibeamer@lightRed}
1038 \hypersetup{urlcolor=fibeamer@lightRed}
1039 %% Blocks
1040 \setbeamercolor*{block title}{%
1041   fg=fibeamer@white, bg=fibeamer@red!60!fibeamer@white}
1042 \setbeamercolor*{block title example}{%
1043   fg=fibeamer@white, bg=fibeamer@red!60!fibeamer@white}
1044 \setbeamercolor*{block title alerted}{%
1045   fg=fibeamer@darkRed, bg=fibeamer@lightOrange}
1046 \setbeamercolor*{block body}{%
1047   fg=fibeamer@red,
1048   bg=fibeamer@gray!15!fibeamer@white}
1049 \usebeamercolor*{normal text}
1050 %% Code listings
1051 \lstset{%
1052   commentstyle=\color{green!30!fibeamer@white},
1053   keywordstyle=\color{blue!30!fibeamer@white},
1054   stringstyle=\color{fibeamer@lightRed}}
1055 }{%
1056 \endgroup}

```

Outside the darkframes environment, the light theme is used.

```

1057 %% Structures
1058 \setbeamercolor{frametitle}{fg=fibeamer@red}
1059 \setbeamercolor{framesubtitle}{fg=fibeamer@black!75!fibeamer@white}
1060 %% Text
1061 \setbeamercolor{normal text}{fg=fibeamer@black, bg=fibeamer@white}
1062 \setbeamercolor{structure}{fg=fibeamer@black, bg=fibeamer@white}

1063 \setbeamercolor{alerted text}{fg=orange}
1064 \addtobeamertemplate{block begin}{%
1065   \iffibeamer@dark % alerted text in plain block at dark slides
1066     \setbeamercolor{alerted text}{fg=fibeamer@orange}%
1067   \fi{}}

1068 %% Items, footnotes and links
1069 \setbeamercolor*{item}{fg=fibeamer@red}
1070 \setbeamercolor*{footnote mark}{fg=fibeamer@red}
1071 \hypersetup{urlcolor=fibeamer@red}
1072 %% Blocks
1073 \setbeamercolor{block title}{%
1074   fg=fibeamer@white, bg=fibeamer@red}
1075 \setbeamercolor{block title example}{%
1076   fg=fibeamer@white, bg=fibeamer@red}

```

```

1077 \setbeamercolor{block title alerted}{%
1078   fg=fibeamer@white, bg=orange}
1079 \setbeamercolor{block body}{%
1080   fg=fibeamer@red!90!fibeamer@black,
1081   bg=fibeamer@gray!20!fibeamer@white}
1082 %% Title
1083 \setbeamercolor{title}{fg=fibeamer@white, bg=fibeamer@red}
1084 % Code listings
1085 \lstset{%
1086   basicstyle=\footnotesize\ttfamily,
1087   breakatwhitespace=false,
1088   breaklines=true,
1089   commentstyle=\color{green!60!fibeamer@black},
1090   extendedchars=true,
1091   keywordstyle=\color{blue},
1092   showspaces=false,
1093   showstringspaces=false,
1094   showtabs=false,
1095   stringstyle=\color{violet}}
1096 \mode
1097 <all>

```

4.10 The Faculty of Sports Studies

4.10.1 The theme/mu/beamercolorthemefibeamer-fsps.sty file

This is the color theme for presentations written at the Faculty of Sports Studies at the Masaryk University in Brno. This theme has no effect outside the presentation mode.

```

1098 \NeedsTeXFormat{LaTeX2e}
1099 \ProvidesPackage{fibeamer/theme/mu/%
1100   beamercolorthemefibeamer-mu-fsps}[2016/05/06]
1101 \mode<presentation>

```

This color theme uses the combination of yellow and shades of gray. The fibeamer@{dark,light}@background{Inner,Outer} colors are used within the background canvas template, which is defined within the base color theme of the Masaryk University and which draws the gradient background of the frames.

```

1102 \definecolor{fibeamer@black}{HTML}{000000}
1103 \definecolor{fibeamer@white}{HTML}{FFFFFF}
1104 \definecolor{fibeamer@blue}{HTML}{283889}
1105 \colorlet{fibeamer@darkBlue}{fibeamer@blue!60!fibeamer@black}
1106 \definecolor{fibeamer@brightBlue}{HTML}{3998F9}
1107 \colorlet{fibeamer@lightBlue}{fibeamer@blue!30!fibeamer@white}
1108 \definecolor{fibeamer@gray}{HTML}{999999}
1109 \definecolor{fibeamer@lightOrange}{HTML}{FFA25E}
1110 \colorlet{fibeamer@orange}{fibeamer@lightOrange!80!fibeamer@darkBlue}

1111 %% Background gradients
1112 \colorlet{fibeamer@dark@backgroundInner}{fibeamer@darkBlue}

```

```

1113 \colorlet{fibeamer@dark@backgroundOuter}{fbeamer@darkBlue}
1114 \colorlet{fbeamer@light@backgroundInner}{fbeamer@white}
1115 \colorlet{fbeamer@light@backgroundOuter}{fbeamer@white}

```

The `darkframes` environment switches the `\ifffbeamer@darktrue` conditional on and sets a dark color theme.

```

1116 \renewenvironment{darkframes}{%
1117   \begingroup
1118   \fibeamer@darktrue
1119   %% Structures
1120   \setbeamercolor*{frametitle}{fg=fibeamer@blue!30!fbeamer@white}
1121   \setbeamercolor*{framesubtitle}{fg=fibeamer@white}
1122   %% Text
1123   \setbeamercolor*{normal text}{fg=fibeamer@white, bg=fibeamer@blue}
1124   \setbeamercolor*{structure}{fg=fibeamer@white, bg=fibeamer@blue}

1125   \setbeamercolor*{alerted text}{fg=fibeamer@lightOrange}

1126   %% Items, footnotes and links
1127   \setbeamercolor*{item}{fg=fibeamer@lightBlue}
1128   \setbeamercolor*{footnote mark}{fg=fibeamer@lightBlue}
1129   \hypersetup{urlcolor=fibeamer@lightBlue}
1130   %% Blocks
1131   \setbeamercolor*{block title}{%
1132     fg=fibeamer@white, bg=fibeamer@blue!60!fbeamer@white}
1133   \setbeamercolor*{block title example}{%
1134     fg=fibeamer@white, bg=fibeamer@blue!60!fbeamer@white}
1135   \setbeamercolor*{block title alerted}{%
1136     fg=fibeamer@darkBlue, bg=fibeamer@lightOrange}
1137   \setbeamercolor*{block body}{%
1138     fg=fibeamer@blue,
1139     bg=fibeamer@gray!15!fbeamer@white}
1140   \usebeamercolor*{normal text}
1141   %% Code listings
1142   \lstset{%
1143     commentstyle=\color{green!30!fbeamer@white},
1144     keywordstyle=\color{blue!40!fbeamer@brightBlue!25!fbeamer@white},
1145     stringstyle=\color{red!30!fbeamer@white}}
1146   }{%
1147   \endgroup}

```

Outside the `darkframes` environment, the light theme is used.

```

1148 %% Structures
1149 \setbeamercolor{frametitle}{fg=fibeamer@blue}
1150 \setbeamercolor{framesubtitle}{fg=fibeamer@black!75!fbeamer@white}
1151 %% Text
1152 \setbeamercolor{normal text}{fg=fibeamer@black, bg=fibeamer@white}
1153 \setbeamercolor{structure}{fg=fibeamer@black, bg=fibeamer@white}

1154 \setbeamercolor{alerted text}{fg=red}
1155 \addtobeamertemplate{block begin}{%

```

```

1156 \iffifebeamer@dark % alerted text in plain block at dark slides
1157   \setbeamercolor{alerted text}{fg=fibeamer@orange}%
1158   \fi}{}}

1159 %% Items, footnotes and links
1160 \setbeamercolor{item}{fg=fibeamer@blue}
1161 \setbeamercolor{footnote mark}{fg=fibeamer@blue}
1162 \hypersetup{urlcolor=fibeamer@blue}
1163 %% Blocks
1164 \setbeamercolor{block title}{%
1165   fg=fibeamer@white, bg=fibeamer@blue}
1166 \setbeamercolor{block title example}{%
1167   fg=fibeamer@white, bg=fibeamer@blue}
1168 \setbeamercolor{block title alerted}{%
1169   fg=fibeamer@white, bg=red}
1170 \setbeamercolor{block body}{%
1171   fg=fibeamer@blue, bg=fibeamer@gray!20!fibeamer@white}
1172 %% Title
1173 \setbeamercolor{title}{fg=fibeamer@white, bg=fibeamer@blue}
1174 % Code listings
1175 \lstset{%
1176   basicstyle=\footnotesize\ttfamily,
1177   breakatwhitespace=false,
1178   breaklines=true,
1179   commentstyle=\color{green!60!fibeamer@black},
1180   extendedchars=true,
1181   keywordstyle=\color{fibeamer@brightBlue!50!fibeamer@blue},
1182   showspaces=false,
1183   showstringspaces=false,
1184   showtabs=false,
1185   stringstyle=\color{violet}}
1186 \mode
1187 <all>

```

Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

| | |
|--|---|
| Symbols \- 220 \@ifpackageloaded 85 \@ifundefined 256, 257 \@latex@error 97 | 526, 615, 706, 797, 886, 975, 1064, 1155 \addtolength 283, 288 \AtBeginDocument 142, 223 B \baselineskip 341, 344, 364 \begin 179, 187, 310, 325, 341, 347, 361, 369 \begingroup 96, 97, 396, |
| A \addtobeamertemplate 434, | |

| | | |
|-----------------|---|--|
| | | E |
| \bfseries | 207, 211 | \else 17, 26, 33, 37, 40, 44, 48, 51, 55, 58, 63, 112, 255, 309, 435, 707 |
| \boolean | 149, 177 | \empty 30, 31, 35, 42, 46, 70, 74 |
| \bullet | 219 | \end . 185, 193, 318, 336, 343, 356, 364, 372 |
| | | \endgroup 426, 518, 607, 698, 789, 878, 967, 1056, 1147 |
| | | \ExecuteOptionsBeamer 4, 8, 11, 13, 29, 71, 75, 77 |
| | | \expandafter 110, 111, 113, 115, 116 |
| | | |
| | | F |
| | | \fi ... 17, 28, 39, 53, 54, 60, 61, 62, 65, 66, 67, 114, 121, 159, 260, 319, 437, 529, 618, 709, 800, 889, 978, 1067, 1158 |
| \colorlet ... | 384, 385, 386, 389, 391, 392, 393, 394, 477, 478, 480, 482, 483, 484, 485, 566, 567, 570, 572, 573, 574, 575, 656, 657, 658, 659, 660, 663, 664, 665, 666, 748, 749, 752, 754, 755, 756, 757, 837, 838, 841, 843, 844, 845, 846, 926, 927, 930, 932, 933, 934, 935, 1015, 1016, 1019, 1021, 1022, 1023, 1024, 1105, 1107, 1110, 1112, 1113, 1114, 1115 | \fbeamer@basePath ... 23, 32, 52, 59, 64 \fbeamer@darkfalse 174 \fbeamer@darktrue 397, 488, 578, 669, 760, 849, 938, 1027, 1118 |
| \colorlet ... | | \fbeamer@empty 24 |
| \colorlet ... | | \fbeamer@faculty 12, 79, 83, 91 |
| \colorlet ... | | \fbeamer@fallbackLogo 80, 98 |
| \colorlet ... | | \fbeamer@fontstrue 5 |
| \colorlet ... | | \fbeamer@fontstrue 3 |
| \colorlet ... | | \fbeamer@includeLogo 92, 332 |
| \colorlet ... | | \fbeamer@lengths@baseunit 263, 264, 268, 272, 279, 293 |
| \colorlet ... | | \fbeamer@lengths@clipbottom 180, 188, 281, 282, 283, 284, 285, 289 |
| \colorlet ... | | \fbeamer@lengths@cliptop 181, 189, 286, 287, 288 |
| \colorlet ... | | \fbeamer@lengths@footerpad 266, 267, 312, 313 |
| \colorlet ... | | \fbeamer@lengths@logoheight 294, 295, 329, 334 |
| \colorlet ... | | \fbeamer@lengths@logowidth 291, 292, 296, 328, 333 |
| \colorlet ... | | \fbeamer@lengths@margin 270, 271, 274, 275 |
| \colorlet ... | | \fbeamer@lengths@titleline 277, 278, 301 |
| \colorlet ... | | \fbeamer@locale 14, 20 |
| \colorlet ... | | \fbeamer@logo 76, 101 |
| \colorlet ... | | \fbeamer@logoLocale 20, 79 |
| \colorlet ... | | \fbeamer@logoPath 72, 78, 82 |
| \colorlet ... | | \fbeamer@microtypetfalse 9 |
| \colorlet ... | | \fbeamer@microtypetrue 7 |
| \colorlet ... | | \fbeamer@oldcite 224, 227 |
| \colorlet ... | | \fbeamer@patch 102 |
| \colorlet ... | | \fbeamer@patch@action 104, 110 |

| | | | |
|-----------------------------------|---|--|--|
| \fbeamer@patch@arg | 106, 108, 112 | \inserttocssubsection | 238 |
| \fbeamer@patch@next | 105, 109, 111, 113, 115 | \inserttocssubsectionnumber | 236, 243 |
| \fbeamer@patch@relax | 107, 112 | \inserttocssubsubsection | 246 |
| \fbeamer@patch@versions | 103, 116 | \inserttocssubsubsectionnumber | 244 |
| \fbeamer@require | 84, 87, 88, 90, 92 | \inserttotalframenumber | 317 |
| \fbeamer@requireTheme | 86, 162, 163, 164, 165 | \itshape | 210 |
| \fbeamer@subdir | 30, 69, 73 | K | |
| \fbeamer@themePath | 68, 87, 88, 90 | \kern | 232, 238, 246 |
| \fbeamer@university | 10, 75, 78, 82, 88, 89, 90, 91 | L | |
| \fbeamer@version | 1 | \languagename | 16, 17 |
| \fbeamer@version@number | 108 | \LARGE | 207 |
| \file | 10 | \Large | 208, 209 |
| \font | 134 | \large | 210, 212 |
| \footnotesize | 457, 547, 636, 729, 818, 907, 996, 1086, 1176 | \leftmargini | 234, 240 |
| G | | \leftmarginii | 241 |
| \Gin@ii | 95 | \let | 224 |
| \guillemotright | 221 | \lstset | 421, 456, 513, 546, 602, 635, 693, 728, 784, 817, 873, 906, 962, 995, 1051, 1085, 1142, 1175 |
| H | | M | |
| \hspace | 234, 240, 241 | \mode | 122, 160, 170, 200, 205, 213, 218, 247, 252, 374, 379, 467, 472, 557, 562, 646, 651, 739, 744, 828, 833, 917, 922, 1006, 1011, 1096, 1101, 1186 |
| \hypersetup | 199, 408, 441, 500, 533, 589, 622, 680, 713, 771, 804, 860, 893, 949, 982, 1038, 1071, 1129, 1162 | N | |
| I | | \NeedsTeXFormat | 166, 202, 215, 249, 376, 469, 559, 648, 741, 830, 919, 1008, 1098 |
| \if | 34, 41, 45, 49, 56 | \newcommand | 93 |
| \iffbeamer@dark | 174, 435, 527, 616, 707, 798, 887, 976, 1065, 1156 | \newdimen | 256, 257 |
| \iffbeamer@fonts | 1, 124 | \newenvironment | 169 |
| \iffbeamer@microtype | 6, 119 | \newif | 2, 6, 174 |
| \IfFileExists | 84 | \newlength | 263, 266, 270, 277, 281, 286, 291, 294 |
| \ifnum | 309 | \node | 311, 331 |
| \ifpdf | 255 | \normalsize | 206 |
| \ifthenelse | 149, 176 | O | |
| \ifx | 16, 24, 31, 35, 42, 46, 108, 112 | \oldstylenums | 130 |
| \includegraphics | 95, 98, 101 | \OR | 149, 177 |
| \insertauthor | 371 | P | |
| \insertbiblabel | 222 | \paperheight | 259, 283 |
| \insertframenumber | 317 | \paperwidth | 181, 184, 189, 192, 258, 282, 287 |
| \insertframesubtitle | 307 | \par | 232, 238, 246, 304 |
| \insertframetitle | 304 | \patchcmd | 95 |
| \insertsubtitle | 363 | \path | 182, 190 |
| \inserttitle | 342 | | |
| \inserttocsection | 232 | | |
| \inserttocsectionnumber | 230, 236, 243 | | |

| | | |
|-----------------------|--|--|
| \pdfpageheight | 257, 259 | |
| \pdfpagewidth | 256, 258 | |
| \pgfpathlineto | 353 | |
| \pgfpathmoveto | 352 | |
| \pgfpoint | 352, 353 | |
| \pgfsetdash | 350 | |
| \pgfsetlinewidth | 348 | |
| \pgfsetroundcap | 349 | |
| \pgfusepath | 355 | |
| \ProcessOptionsBeamer | 117 | |
| \ProvidesPackage | 1, 167, 203, 216, 250, 377, 470, 560, 649, 742, 831, 920, 1009, 1099 | |
| R | | |
| \raggedright | 342, 362, 370 | |
| \relax | 107, 109, 116 | |
| \renewcommand | 97, 130 | |
| \renewenvironment | 395, 486, 576, 667, 758, 847, 936, 1025, 1116 | |
| \RequirePackage | 85, 120, 125, 126, 127, 128, 129, 147, 150, 154, 155, 157, 171, 172, 173, 253, 254, 261, 262 | |
| S | | |
| \setbeamercolor | 195, 399, 400, 402, 403, 404, 406, 407, 410, 412, 414, 416, 428, 429, 431, 432, 433, 436, 439, 440, 443, 445, 447, 449, 452, 453, 454, 490, 491, 493, 494, 495, 498, 499, 502, 504, 506, 508, 520, 521, 523, 524, 525, 528, 531, 532, 535, 537, 539, 541, 544, 580, 581, 583, 584, 585, 587, 588, 591, 593, 595, 597, 609, 610, 612, 613, 614, 617, 620, 621, 624, 626, 628, 630, 633, 671, 672, 674, 675, 676, 678, 679, 682, 684, 686, 688, 700, 701, 703, 704, 705, 708, 711, 712, 715, 717, 719, 721, 724, 725, 726, 762, 763, 765, 766, 767, 769, 770, 773, 775, 777, 779, 791, 792, 794, 795, 796, 799, 802, 803, 806, 808, 810, 812, | |
| T | | |
| \textwidth | 341, 353, 361, 369 | |
| \ttfamily | 457, 547, 636, 729, 818, 907, 996, 1086, 1176 | |
| U | | |
| \undefined | 16 | |
| \usebeamercolor | 226, 229, 231, 235, 237, 242, 245, 302, 305, 315, 340, 360, 368, 419, 511, 600, 691, 782, 871, 960, 1049, 1140 | |
| \usebeamertemplate | 303, 306, 316, 339, 359, 367 | |
| \usepackage | 153 | |
| V | | |
| \vfill | 357 | |
| \vskip | 300, 301, 344, 364 | |

Change History

| | | |
|---------------------------|---------------|----|
| v1.0.1 | | |
| General: Added DVI output | support. [VN] | 13 |

| | | |
|--|---|----|
| v1.0.2 | macro. [VN] | 7 |
| General: Added the opt-out microtype option. [VN] | 3 | |
| v1.0.3 | macro. [VN] | 7 |
| General: The example documents from the example directory and the user guide from the guide directory are now a part of the CTAN archive. [VN] | 1 | |
| v1.0.4 | macro. [VN] | 7 |
| General: Updated the user guide of the Masaryk University in Brno. [VN] | 1 | |
| v1.1.0:1 | \fibeamer@locale: Added the locale option and the \fibeamer@locale macro. [VN] | 4 |
| \fibeamer@logo: Changed the implicit value of the \fibeamer@logo macro. [VN] | 6 | |
| General: Added the new logo files for the faculties of the Masaryk University in Brno and removed the old logo files. [VN] | 1 | |
| The faculty logos are no longer displayed on regular slides, as per the new unified design of the Masaryk University in Brno. [VN] | 14 | |
| v1.1.0:2 | \fibeamer@logoLocale: Added the logoLocale option and the \fibeamer@logoLocale macro. [VN] | 4 |
| v1.1.0:3 | \fibeamer@fallbackLogo: Added the \fibeamer@fallbackLogo macro. [VN] | 7 |
| v1.1.0:4 | General: Length definitions within the themes of the Masaryk University in Brno are no longer based on the dimensions of the (now unused) logo in the upper right corner. [VN] | 13 |
| v1.1.0:5 | \fibeamer@includeLogo: Added the \fibeamer@includeLogo | |
| v1.1.0:6 | macro. [VN] | 7 |
| General: Added support for the \tableofcontents to the themes of the Masaryk University in Brno. [VN] | 12 | |
| Added the logo dimension definitions to the themes of the Masaryk University in Brno. [VN] | 14 | |
| Updated the example documents of the Masaryk University in Brno to showcase the use of the \tableofcontents. [VN] | 1 | |
| v1.1.0:7 | macro. [VN] | 7 |
| General: Added support for \alert to the themes of the Masaryk University in Brno. [VN] | 17, 19–22, 24, 26–31, 33, 35 | |
| Updated the example documents of the Masaryk University in Brno to showcase the use of \alert. [VN] | 1 | |
| v1.1.0:8 | macro. [VN] | 7 |
| General: Added support for colored citations to the themes of the Masaryk University in Brno. [VN] | 12 | |
| v1.1.1:1 | \fibeamer@fallbackLogo: Added the fallbackLogo option. [VN] | 7 |
| v1.1.1:2 | macro. [VN] | 7 |
| General: Added proper coloring of \qed to the themes of the Masaryk University in Brno. [VN] | 11 | |
| v1.1.1:3 | macro. [VN] | 7 |
| General: Refactored the themes of the Masaryk University in Brno. Removed the useless uses of use in the color themes. Replaced \setbeamertemplate in the inner theme with the more appropriate \defbeamertemplate*. Added missing %. [VN] | 1 | |
| v1.1.2 | \fibeamer@patch: Added \fibeamer@patch. | 8 |

| | | |
|----------|---|------------------------------------|
| v1.1.3 | General: Added visual tests of output PDFs. | 11, 17–22, 24, 26–31, 33, 35, 36 |
| v1.1.4:1 | General: Completely revamped the color theme of the Faculty of Education at the Masaryk University in Brno. [VN] | 23 |
| | Completely revamped the color theme of the Faculty of Informatics at the Masaryk University in Brno. [VN] | 16 |
| v1.1.4:2 | General: Removed gradient backgrounds from the color themes of the Masaryk University in Brno. [VN] | 16, 19, 21, 23, 26, 28, 30, 32, 34 |
| v1.1.4:3 | General: Added proper link coloring for the color themes of the Masaryk University in Brno. [VN] | |
| v1.1.4:4 | General: Added support for subtitle and author name coloring within the color themes of the Masaryk University in Brno. [VN] | 16, 18, 25 |
| v1.1.4:5 | General: Unified the alert colors in the color themes of the Masaryk University in Brno. [VN] | 17, 19–22, 24, 26–31, 33, 35 |
| v1.1.5:1 | General: Added pdfencoding to the hyperref package setup. This fixes the problem with garbled characters in PDF metadata with LuaTeX. | 1 |
| v1.1.5:2 | General: Updated the light color theme of the Faculty of Informatics at the Masaryk University in Brno. [VN] | 17 |