elpres — electronic presentations with (pdf/Lua)LATEX

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1 Introduction

The elpres class is intended to be used for presentations on a computer screen, a beamer or a projector. It is derived from LATEX's article class and may be used with LATEX, pdfLATEX (and LuaLATEX). The default "virtual paper size" of document pages produced by this class: width=128mm, height=96mm corresponds to a 4:3 (width:height) aspect ratio. Other aspect ratios for widescreen monitors may be selected by class options. The elpres class requires that the ifthen, fancyhdr, hyperref, graphicx, xcolor and geometry packages are available on the TEX system: these packages are loaded automatically by the elpres class. Enhancements to elpres are easily made available by other packages, these include overlay support for incremental slides (package overlays) and slides with a background from a bitmap (wallpaper, eso-pic packages). Predefined color/layout schemes for elpres presentations can be activated with \usepackage (details can be found in in section 4.10)

This manual is intended to support the user with "recipes". Use of elpres with its default settings should be simple, additional aspects including overlay functions, use of colors, graphics files, "handout documents" are described in section 4. Many code snippets have been included in this manual. They can be used in users' presentation files.¹

Some extensions described in this manual work only with pdf-files which should preferrably be compiled with pdfIATEX or LuaIATEX.

2 Installation

If the elpres package has already been installed with the TEX-system nothing needs to be done. If an updated version shall be installed (or if the preinstalled elpres version does not work properly²), elpres.cls, all *.sty, *.png and *.eps files should be copied into a directory, where the TEX-system can find it: if an old elpres version of the existing TEX system shall be replaced by the current version, please copy these into the appropriate position in the "local" texmf directory tree (e.g. ~/texmf/tex/latex/elpres) and this manual (elpres-manual.pdf) to ~/texmf/doc/latex/elpres, where /texmf may be /texmf-local or an analogous directory.

¹To make copying easier, this manual is also available as .html document on the elpres website (http://www.vkiefel.de/elpres.html)

²for details see the description on checking the elpres-installation in section 3.1

Then, the files database should be updated by entering (in case of a TeX Live installation) the command:

```
mktexlsr ~/texmf-local
```

or you may enter texhash ~/texmf-local³. Other T_EX-systems e.g. MiKT_EX have their own package updating mechanisms. The elpres manual file should be accessible with the command "texdoc elpres". If this still calls the old version of the manual, the command "texdoc -l elpres" will prompt you to select either the old or the new version of the manual.

3 Usage

The class is used with

\documentclass[options]{elpres}

Elpres-specific options: font selection: tmrfont (Times Roman), helvetfont (Helvetica), cmfont (Computer Modern) and sansfont (Sans Serif: default). The option nofonts (no font selection) is intended for use of elpres with LuaLATEX with its own font selection mechanisms. Options for different screen aspect ratios: 4x3 (default), 16x9, 16x10. The option bulletsymb selects \$\bullet\$ symbols instead of the default itemize-environment symbols in all four levels, ballsymb is effective together with the presentation schemes (section 4.10) and provides alternative symbols for the itemize environment. The option navisymb adds a small field with symbols for navigation to the right bottom area of the presentation. Options of the article class are also available for elpres presentations, e.g. 10pt, 11pt, 12pt for selection of font size.

Elpres-specific commands: \distance vertically adjusts text on a slide. The \auvimm⁴ command inserts a link to an external audio or video file. Two commands: \fromlinktext and \totargettext can be used for internal links within a presentation. With \slidetitlecolor, the text color of slides (psli) can be changed. With the command \pagenrconst, the page number of the current slide can be set to the page number of the previous slide.

Elpres-specific environments: the environments psli and rsli define "slides" in elpres; citemize, cenumerate and cdescription provide vertically compressed lists.

3.1 A minimalistic example presentation

The following code (minimal.tex) may be used for your first "experiments" by adding features described in later sections.

```
\documentclass[12pt,pdftex,4x3]{elpres}
\usepackage[latin1]{inputenc}
\usepackage[document]{ragged2e}
```

- % \usepackage{elpreswhitebluescheme}
- % \usepackage{elpresbluelightgrayscheme}
- % \usepackage{elpresgrayscheme}
- % \usepackage{elpreswhiteredscheme}

³The location for the "local", manually updated class and package files may be different, depending on the TEX system and the OS.

⁴for **au**dio **vi**deo **m**edia

```
\usepackage{elpreswhitetealscheme}
   \begin{document}
   \begin{titlepage}
   \centering
   \distance{1}
   \Huge \bfseries \textcolor{eptitlecolor}{Title of the presentation} \par
   \vspace{1.3ex} \large
   Author\\[2ex]Institution
   \distance{2}
   \end{titlepage}
   \begin{psli}[Title of Page]
   The first page: \texttt{psli} environment
   \begin{itemize}
   \item first line in an itemized list
   \item second line in an itemized list
   \end{itemize}
   \end{psli}
   \begin{rsli}
   The second page: \texttt{rsli} environment
   \begin{enumerate}
   \item no title
   \item not centered vertically
   \end{enumerate}
   \end{rsli}
   \end{document}
The preamble of the same presentation for LuaLATEX would read:
   % LuaLaTeX: Please use utf-8 encoding!
   \documentclass[12pt,nofonts,4x3]{elpres}
   \usepackage[document]{ragged2e}
   \usepackage{fontspec}
   \setmonofont{TeX Gyre Cursor}
                                               %% based on 'Courier'
   \setsansfont[Scale=0.92]{Tex Gyre Heros}
                                               %% similar to 'Helvetica'
   \setmainfont{TeX Gyre Termes}
                                               %% 'Roman' style serif font
   \renewcommand{\familydefault}{\sfdefault}
   % \usepackage{elpreswhitebluescheme}
   \usepackage{elpreswhitetealscheme}
```

```
% \usepackage{elpresbluelightgrayscheme}
% \usepackage{elpresgrayscheme}
% \usepackage{elpreswhiteredscheme}
\usepackagefocument}
% ...
\end{document}
```

The use of LuaIATEX with elpres is heavily recommended due to the superior font selection mechanisms. You may copy the code examples from this manual more easily from the .html version of this manual available at http://vkiefel.de/elpres/elpres-manual.html.

Testing of the elpres installation

With this example you may check, if elpres has been installed correctly in your TEX-system: copy the listing of minimal.tex into a file, add the class option ballsymb:

```
\documentclass[12pt,pdftex,4x3,ballsymp]{elpres}
```

and process it with pdflatex. The line \usepackage{elpreswhitetealscheme} should not be commented out, i.e. the package elpreswhitetealscheme should be active. If processing of minimal.tex results in a message like

```
... `ep-ball-04' not found ...
```

the T_EX-system does not find the file ep-ball-04.png in the appropriate place. In such a situation it is recommended

- 1. either to install the current version of elpres in the correct subdirectories of the "local" texmf-directory, details are described in section 2
- 2. or to copy the small elpres graphics files ep-ball-nn.eps ep-ball-nn.png into a directory of the tex-branch of the local texmf-directory tree (followed by an update see of TEXs files database, for details see section 2). The files may be obtained from the elpres project page http://vkiefel.de/elpres.html⁵
- 3. or to copy the required image file into the current project directory.

The problem sometimes arises as soon as TEX-distributions do not install elpres correctly. For details see README.md in the archive elpres.zip, which may be obtained from ctan.org.

3.2 Essential elements of an elpres presentation

The title page slide can be created with the titlepage environment (or rsli, see below), LATEX's \maketitle command is not available. Slides may be created with the psli-environment⁶, you may add the title of the slide with the optional parameter. The contents of the slide are centered vertically.

 $^{^5} http://vkiefel.de/elpres/elpres-ball-image-files.zip <math display="inline">^6 psli:\ plain\ slide$

Another environment generating a slide is rsli⁷: slides are written without title, contents are not vertically centered.

The \distance{number} command allows to introduce vertical space into slides constructed with the rsli and titlepage environments. You should use pairs of \distance{} commands with numbers indicating the relative height of empty space, see the titlepage in the example above.

The use of footnotes on slides is often problematic, if they cannot be avoided, the footmisc package is recommended: the perpage option resets numbering for each new slide. For a presentation, the symbol option allows to use symbols instead of numbers. After inserting a new footnote, numbers or symbols are correctly inserted only after a second run of LATEX.

3.3 Alternatives to T_EX's justified paragraphs

By default, LATEX produces justified paragraphs with lines of equal length, this may often not be appropriate for the usually very short lines of text in presentations. The LATEX \raggedright command has its own deficiencies: by inhibiting hypenation in texts with rather short lines, the right margin will often look too ragged. A solution is to use the \RaggedRight command of the ragged2e package.

3.4 Vertically compressed lists

As the spaces between lines may be too great with the itemize environment, the elpres package provides a "vertically compressed" citemize-environment:

```
\begin{citemize}
  \item one
  \item two
\end{citemize}
```

Similarly, a cenumerate and a cdescription environment may be used.

Another solution for the customization of itemize environments is given by the enumitem package. Therefore

```
\usepackage{enumitem}
```

should be added to the preamble, and a comma-sperated list of parameters parameters can be added in the format:

```
\begin{itemize}[parameter-list]
    ...
\end{itemize}
```

The "vertically compressed" list can then be obtained with

```
\begin{itemize} [nosep]
  \item one
  \item two
\end{itemize}
```

Similarly, the enumitem package is also able to modify the enumerate and description environments.

⁷rsli: raw slide

3.5 Slide layout: changes in slide title, footer, page numbers

By default, the **text color of the titles** of **psli**-slides is black, it may be changed by redefining the "value" of the \slidetitlecolor{} command like

```
\slidetitlecolor{blue}
```

in the preamble. Of course, you may also use the named colors of the **xcolor** package (see section 4.1).

By default the **page number** appears at the right bottom of the slide (in the "footer" in the terminology of the fancyhdr package) this position can be addressed by the \rfoot{} command: the \rfoot{} and \lfoot{} commands can be used by the author of a presentation.

However, access to the header fields defined by fancyhdr is blocked⁸. If you wish to change the position of the page number in the footer, you can overwrite the default page number with an "empty" \rfoot{} command and put it to the center or the left margin of the footer (\cfoot{\footnotesize \thepage} or \lfoot{\footnotesize \thepage}). These "footer fields" are also suitable to enter a logo visible on all pages (in form of a graphics file using \includegraphics[]{}) or text with the name of the speaker's institution.

The user may also use predefined **presentation schemes** with defined colors and layout elements (e. g. symbols used in list envoronments), details are described in section 4.10.

4 Enhancements to elpres

4.1 Use of named colors of xcolor

The elpres class automatically loads the xcolor package. Color related commands may therefore be used with names defined by colorx. They are however only accessible in groups (dvipsnames, svgnames, x11names). As an example, the color Indigo is available in svgnames. If you wish to use it you will have to enter svgnames as elpres class option:

```
\documentclass[11pt,16x9,svgnames]{elpres}
```

This option is then automatically "handed over" to the xcolor package. The complete lists of named colors are found in the xcolor manual.

4.2 Include graphics files

Graphics files/pictures can be included with the includegraphics-command of the graphicx-package. Please be aware that the dimensions of the pages are 128mm x 96mm and therefore included graphics are scaled appropriately. A safe way to generate a page with a picture could be (with pict.png as the name of the graphics file):

```
\usepackage[pdftex]{graphicx} % (in preamble)
...
\begin{rsli}
  \centering
  \distance{1}
```

⁸If you enter \rhead, \chead or \lhead, elpres will issue an error message. Use of the header fields will generate unwanted effects on page layout due to fancyhdr.

The \includegraphics[]{} comannd requires to select the correct device driver related option (e.g. pdftex or dvips) (documentclass).

4.3 Arrange text and pictures in two (or more) columns

Text and graphics may be arranged in two or more columns with minipage environments:

```
\begin{minipage} [b] [0.8\textheight] [t] {0.5\textwidth}
  \colorbox{white}{%
    \includegraphics[width=0.9\textwidth] {graphics-file.png}}
\end{minipage}
\begin{minipage} [b] [0.8\textheight] [t] {0.48\textwidth}
\footnotesize
\begin{citemize}
  \item ...
  \item ...
  \item ...
  \end{citemize}
\end{minipage}
\end{minipage}
```

Details on the minipage environment may be found in the LATEX documentation.

4.4 Incremental slides (overlays)

If the contents of slides are to be made visible step by step this can be achieved by a series of output PDF or (PS) files (carrying the same page number) usually called *overlays*. It may also be of interest to change a highlighting color in a series of overlays. This is most easily done by using the excellent overlays package written by Andreas Nolda.

To generate a series of four overlays sequentially showing four lines of a list:

- 1. load the overlays package in the preamble
- 2. put a psli or rsli slide environment into an overlays (or fragileoverlays) environment
- 3. enter the number of overlays as the first parameter to the overlays environment
- 4. enter text contents with the visible command with the range of overlays showing this text content

A simple example:

```
% to be added in preamble
\usepackage{overlays}
...
\begin{overlays}{4}
\begin{psli}[Title of slide]
```

```
\begin{itemize}
  \visible{1-4}{\item first item of list}
  \visible{2-4}{\item second list item}
  \visible{3-4}{\item 3rd list item}
  \visible{4}{\item final list item}
  \end{itemize}
  \end{psli}
  \end{overlays}
```

The following example uses the alert command to highlight lines sequentially:

```
\begin{overlays}{4}
\begin{psli}[Title of slide]
\begin{itemize}
   \alert{1}{\item first item of list}
   \alert{2}{\item second list item}
   \alert{3}{\item 3rd list item}
   \alert{4}{\item final list item}
\end{itemize}
\end{psli}
\end{overlays}
```

The last example shows short text fragments which are shown sequentially using the only command:

```
\begin{overlays}{4}
  \begin{rsli}
    \only{1}{a short text, which will be replaced \ldots }
    \only{2}{\dots by a second \ldots}
    \only{3}{\ldots and a third \ldots}
    \only{4}{\ldots and a final text.}
  \end{rsli}
\end{overlays}
```

The "hidden" text contents are written by overlays in the same color as the background, default is white. If you use a different background color, you have to change the color of the hidden text as well by assigning the background color to the color name background (understood by the overlays package). In the following example you define a light yellow as background:

If you use one of the *presentation schemes* described in section 4.10, the necessary adjustments for the background color will be made automatically. For more details on overlays, see the documentation of the package.

Sometimes it is desirable to prepare two or more consecutive slides with the same page number independent of the overlays package ("manual overlays slides"). Therefore, the page

number of the current slide can be set to the page number of the previous slide/page with the command \pagenrconst.

4.5 Navigation symbols

With the navisymb option of elpres a panel with navigation symbols appears in the right lower corner of the presentation:

$$\ll < > \gg \leftarrow \rightarrow [n]$$

These commands (\ll : jump to the first page, <: go to the previous page, >: go to the next page, \gg : jump to the last page, \leftarrow : go back in history, \rightarrow : go forward in history, [n]: prompt for a page number) work with Adobe Acrobat Reader (Windows), and (with the exception of \leftarrow , \rightarrow and [n]) with evince (Linux). Some of these functions also work in presentation-mode of the "internal" PDF-viewer in recent versions of the Firefox-browser (Linux, Windows).

4.6 Run multimedia content from a presentation

In this section inclusion of video and audio files into a presentation will be described. With the \auvimm{}} command described below you will be able to lauch an external application for playing the video or audio file. This will work in many situations for video and audio files on Windows (Adobe Acrobat) and Linux (e.g. using evince and) systems in fullscreen mode. Under certain conditions it is possible to define a "poster area" on a slide and the pdf viewer starts (after clicking with the mouse pointer into this area) the presentation of the video within this frame. The advantage of this technique is that it avoids that window with the external application is started. On Linux systems the pdfpc viewer allows this, a detailed description is shown below. In both situations, however, the multimedia file is not incorprated into the pdf-file and must be available on the computer at the time of the presentation, ideally in the same directory as the .pdf-file.

The command \auvimm{text}{media-file} inserts text with a link ("poster"), which allows to start the external default application for an audio or video media file (media-file). This worked flawlessly on the computers of the author of this manual with Adobe Acrobat Reader (Windows) and with evince (Linux). An example for using this command:

```
\auvimm{[sound-file]}{./audiofile.mp3}
```

This produces the (text-based) "button" or "poster" [sound-file]. You may also insert an image file as a poster with a graphics file using \includegraphics:

```
\auvimm{\includegraphics{/path/to/poster.png}}{./audiofile.mp3}
```

If you hit the poster area with the mouse pointer, it will launch the default application for audio files in a seperate window. This should be possible even if the pdf-viewer works if fullscreen-mode at the time of presentation. If this does not work, it may be necessary to insert as "launch" command:

```
\auvimm{[video-file]}{run:./videofile.mp4}
```

⁹The \auvimm command uses the \href command of the hyperref package

This approach requires that you keep the presentation file together with the multimedia files in the same folder, also at the time of the presentation. On an unknown computer system (where you have to show your presentation) you should test this aspect of your presentation. Sometimes a call to an external program might be blocked due security reasons in Acrobat Reader.

This \auvimm{}-command should be considered experimental. Its behavior depends on the pdf-viewer and the configuration of the OS.

On Linux systems, the pdfpc pdf-viewer¹⁰ allows presentation of a video embedded into a "poster area"¹¹ on a slide without starting the external viewer in a separate window. This is supported with the \pdfpcmovie{}{}-command from the pdfpc-movie-package and with \auvimm{}{} using the "run:./video-file" launch-command. An example with \auvimm{}{}:

```
\auvimm{\includegraphics[width=0.4\textwidth]{poster.png}}{run:./video.mp4}
```

This pdfpc-specific extension seems to work only for video files, but not for audio files. A possible solution is to convert an audio file into a "video format", e.g. with the ffmpeg program.

4.7 Prepare a "handout" from a presentation

In advance of a lecture it is often expected that you prepare a "handout" from your presentation with more than one pages on a printed page. Therefore you have several options, three of them are described here. If a presentation contains overlay-slides generated with the overlays package as described in section 4.4, it should be recompiled with the commands described in section 5.2 added to the preamble in order to inactivate the overlays-specific commands.

4.7.1 LATEX article document with a series of single-page pdf-files included

One solution to this problem is (1) to generate a series of single-page pdf-files and (2) to create a pdfLATEX document with the single pages included.

(1) can be done with gs (the ghostscript program):

```
gs -dNOPAUSE -dBATCH -sDEVICE=pdfwrite -sOutputFile=page_%03d.pdf in.pdf
```

with in.pdf as the initial presentation. The syntax of gs is described in detail on the ghostscript website 12. On Windows systems the name of the ghostscript command may be gswin32c.exe or gswin64c.exe. An alternative to gs is the pdftk tool:

```
pdftk in.pdf burst output page_%03d.pdf
```

The syntax of pdftk is explained in the documentation (pdftk --help).

(2) an example for a LATEX document which can serve as handout:

```
\documentclass[12pt]{article}
\usepackage[pdftex]{graphicx}
\usepackage[latin1]{inputenc}
\usepackage[a4paper,hmargin=2.4cm,top=24mm,bottom=28mm]{geometry}
\newcommand{\PictScaleFact}{0.45}
```

¹⁰https://pdfpc.github.io/: pdfpc — A presenter console with multi-monitor support for PDF files

¹¹e. g. defined by a bitmap image with the same aspect ratio as the video

¹²https://www.ghostscript.com/doc/current/Use.htm

```
\begin{document}
\centering
\fbox{\includegraphics[width=\PictScaleFact\textwidth]{page_001.pdf}}
\hspace{5mm}
\fbox{\includegraphics[width=\PictScaleFact\textwidth]{page_002.pdf}}
\\[2ex]
\fbox{\includegraphics[width=\PictScaleFact\textwidth]{page_003.pdf}}
\hspace{5mm}
\% ...
\fbox{\includegraphics[width=\PictScaleFact\textwidth]{page_008.pdf}}
\% ...
\end{document}
```

4.7.2 Create handout with the pdfpages package

Another, more comfortable option is to use the pdfpages package. Here, it is not necessary to split up the presentation into single pages. An example (in "portait format") which generates pages with 2x4 slides (all slides except slide 2) using the \includepdf[]{} command:

```
\documentclass[12pt]{article}
\usepackage[a4paper,hmargin=2cm,bottom=3.2cm]{geometry}
\usepackage{pdfpages}
\begin{document}
\includepdf[pages={1,3-last},nup=2x4,frame=true,%
scale=0.78,%
pagecommand={\thispagestyle{plain}}]{presentation.pdf}
\end{document}
```

Details on the optional parameters of \includepdf can be found in the documentation of the pdfpages package. This code:

```
\documentclass[12pt,landscape]{article}
\usepackage[a4paper,hmargin=2cm,bottom=3.2cm]{geometry}
\usepackage{pdfpages}
\begin{document}
\includepdf[pages={1,3-last},nup=3x2,frame=true,%
scale=0.78,%
pagecommand={\thispagestyle{plain}}]{presentation.pdf}
\end{document}
```

generates pages in "landscape format" with 3x2 slides.

4.7.3 Convert presentation pdf-file directly into handout file with pdfjam

With the following command:

```
pdfjam --nup 2x4 --frame true --scale 0.9 -o new.pdf in.pdf '1-4,6-22' pdfjam<sup>13</sup> creates a "handout" PDF document (new.pdf) fom in.pdf with the slides nr. 1-4,6-22
```

 $^{^{13}}$ which regerettably is only available on Linux or other Unix-like systems, on Windows systems, the procedure described above in section 4.7.2 can be used as alternative

arranged in two columns and four rows. With the additional option "--frame true", pdfjam draws a box around each slide. More details can be found in the pdfjam man page and the project website¹⁴.

4.8 Create presentations with hypertext elements

You may use two commands \fromlinktext{}{} and \totargettext{}{} for "hypertext features". As an example: as you normally will not insert \section{}-like commands and therefore do not generate a "table of contents"-like page or a menu in elpres-presentations, you are able define links with:

```
\totargettext{text}{link-label}
```

which can be addressed by

```
\fromlinktext{text}{link-label}
```

If you use these commands to generate a **menu page** (as a hyperlinked table of contents) with items pointing to specific slides: link-label acts as label, text in the \fromlinktext command is converted to a link (e.g. on a menu-page). If you click on this text "button", you jump to the text labelled with \totargettext; link-label has to be identical in a \fromlinktext and \totargettext pair, text in the link and the target, of course need not to be identical.

The default for the link border color is red, it may be changed with \hypersetup{}, a command from the hyperref package¹⁵. The option for the color of the frame around the link is linkbordercolor, colors must be defined whith three figures [0..1] according to the RGB color model:

```
\hypersetup{linkbordercolor={0.6 0.6 0.6}}
```

This defines a light gray color for the link border, more details on \hypersetup{} are described in the documentation of the hyperref package.

4.9 Fill background of a presentation with bitmaps

4.9.1 Wallpaper package

To create a slide background with a graphical wallpaper background using bitmap files you may use the wallpaper package ¹⁶. Load the wallpaper package with

```
\usepackage{wallpaper}
```

in the preamble. In order to generate a background based on bitmap file background.png, enter

```
\CenterWallPaper{1}{background.png}
```

before the contents of the presentation¹⁷. This works best with bitmaps with an appropriate aspect ratio, in the case of an 4x3 screen format a bitmap picture of 640x480 pixel would fit perfectly. Moreover bitmap files may be used as tiles as described in the wallpaper documentation like

\TileSquareWallPaper{4}{background.png}

¹⁴https://github.com/DavidFirth/pdfjam/blob/master/README.md

¹⁵both, \totargettext and \fromlinktext are are redefinitions of commands from the hyperref package

 $^{^{16}\}mathrm{written}$ by Michael H.F. Wilkinson and available on CTAN

 $^{^{17}}$ i.e. following \begin{document}

More details on this topic may be found in the wallpaper documentation.

4.9.2 Eso-pic package

Another package which allows you to paint the background with a picture is eso-pic¹⁸:

```
\usepackage{eso-pic}
...
\AddToShipoutPicture{
\includegraphics[height=\paperheight]{background.png}}
```

\AddToShipoutPicture{} puts the picture on every page, \AddToShipoutPicture*{} puts it on to the current page, \ClearShipoutPicture clears the background beginning with the current page. Details of eso-pic's commands can be found in the documentation.

4.10 Presentation schemes

Elpres provides predefined **presentation schemes**: color and layout schemes which are applied to a presentation with usepackage{}. Their naming follows the convention elpres...scheme, an example is elpreswhiteredscheme. These elpres-schemes also support incremental slides with the overlays package. Moreover, these schemes define color names which may be used by the author of a presentation: One of the color of a presentation: One of the color of the color

eptextcolor "normal text color" (default values for documents without presentation scheme
included in elpres.cls: black)

ephighlightcolor color, which may be used for highlighting text (default: dark red)

eptitlecolor color of the title of slides, may be used to highlight the title in the title slide (default: dark red)

Presentation schemes available in the current version of elpres:

- elpresbluelightgrayscheme dark blue background of slides; eptextcolor: light gray; eptitlecolor: turquoise; ephighlightcolor: yellow; symbols in *itemize* environment: pale blue bullets; highlighted elements in *enumerate* and *description* environments: pale blue
- elpresgrayscheme gray background of slides; eptextcolor: dark gray; eptitlecolor: dark green; ephighlightcolor: dark red; symbols in *itemize* environment: gray bullets; highlighted elements in *enumerate* and *description* environments: dark green
- elpreswhitebluescheme white background of slides; eptextcolor: blue-black; eptitlecolor: blue; ephighlightcolor: dark red; symbols in *itemize* environment: blue bullets; highlighted elements in *enumerate* and *description* environments: blue
- elpreswhiteredscheme white background of slides; eptextcolor: red/brown-black; eptitlecolor: dark red; ephighlightcolor: dark blue; symbols in *itemize* environment:

 $^{^{18}\}mathrm{written}$ by Rolf Niepraschk and available on CTAN

¹⁹the name of the corresponding style or package file is elpreswhiteredscheme.sty

²⁰Color names for use by the presentation author start with ep...

red bullets; highlighted elements in enumerate and description environments: red

elpreswhitetealscheme white background of slides; eptextcolor: black-teal; eptitlecolor: teal; ephighlightcolor: dark red; symbols in *itemize* environment: blue bullets; highlighted elements in *enumerate* and *description* environments: dark teal

In all of these schemes, the colors of borders for internal and external links have been adjusted.

5 Recipes for use of elpres

5.1 Colored text boxes

Colored text boxes often help the presentation author to highlight small text fragments and to make slides more "readable" and more attractive.

5.1.1 Text boxes with \colorbox, \fcolorbox

A simple method for colored text boxes uses the minipage environment and the colorbox or fcolorbox commands (xcolor package):

```
\begin{psli}[Slide with a textbox]
\begin{center}
  \colorbox{eptitlecolor}{\begin{minipage}{0.85\textwidth}}
    \centering \color{white} \vspace{2ex}
    {\Large
    Text centered in a colorbox
    } \par
    \vspace{2ex}
  \end{minipage}}
\end{center}
\end{psli}
```

The advantage of these simple colored text boxes: they are compatible with incremental slides using the overlays package.

5.1.2 Text boxes with the tcolorbox package

The tcolorbox package provides great support for colored boxes. A minimal example:

```
\begin{psli}[Slide with a textbox]
\begin{tcolorbox}[colframe=eptitlecolor!95!black]
  \textcolor{eptitlecolor}{This is a textbox generated with the
    \texttt{tcolorbox} package}
  \tcblower This the lower part of the tcolorbox
  \end{tcolorbox}
\end{psli}
```

An example with a titled colored textbox:

```
title=Heading of a textbox]
This is another \textbf{tcolorbox}.
\tcblower
Here, the lower part of the box.
\end{tcolorbox}
\end{psli}
```

The manual of the tcolorbox provides perfect instruction for the use of this package. These text boxes may yield problems with incremental slides using the overlays package.

5.2 Inactivate overlays commands

If a pesentation has been prepared with overlay slides (using the overlays) package, the IATEX source code will contain \visible, \only and \alert commands and overlays and fragileoverlays environments.

Sometimes, it is desirable to generate a version of such a presentation without overlays effects, for example for preparation of a printed handout (see section 4.7). The effect of these overlay-specific instructions can be inactivated with these commands:

```
\overlaysoff \alertsoff
```

which should be written into the preamble following \usepackage{overlays}. This works with v2.12 (and probably later versions) of overlays. With earlier versions you may copy the commands

```
\renewenvironment{overlays}[1]{}{}%
\renewenvironment{fragileoverlays}[1]{}{}%
\renewcommand{\visible}[2]{#2}%
\renewcommand{\only}[2]{#2}%
\renewcommand{\alert}[2]{#2}%
```

into the preamble following \usepackage{overlays}, however, inactivation of \only by this method has a different effect, so it is recommended to update the overlays package.

5.3 Convert an elpres-presentation (PDF) into an Impress (LibreOffice) or Powerpoint presentation

Sometimes it is unclear, if organizers of a (scientific) meeting allow presentations with .pdf-files or insist on files in Powerpoint format. This is an unpleasant situation for a lecturer, but in such a situation it is better, to be prepared.

There is no elegant way for a reliable solution. First, you may use one of the free or commercial online conversion tools (intended to convert .pdf into .ppt or .pptx-files). Results are often not satisfactory.

An alternative, more reliable way preferred by the author of this manual:

1. convert the .pdf-file of the presentation into a series of bitmap image files, (e.g. in .png format)

2. import these image .png files into "empty" slides of an Impress (LibreOffice or OpenOffice) presentation and save the presentation in .odp, .ppt or .pptx-Format

Details on step 1 — generate .png images:

Please copy the following two commands (please ignore the line-breaks in the lines beginning with "gs")²¹ into a short shell script (Windows: a .bat or .cmd script) and "run" or execute the shell script:

```
gs -dNOPAUSE -dBATCH -sDEVICE=pdfwrite -dDEVICEWIDTHPOINTS=793.7 -dDEVICEHEIGHTPOINTS=595.3 -dPDFFitPage -sOutputFile=temp.pdf input.pdf
```

```
gs -dNOPAUSE -dBATCH -sDEVICE=png256 -r300 -dTextAlphaBits=4 -sOutputFile=page_%03d.png temp.pdf
```

Please do not forget to adjust the name of the input file (input.pdf in the script above). The first command adjusts the page size of the .pdf-file to 28 x 21 cm (which is written into the temporary file temp.pdf: this format avoids resizing of the images in LibreOffice (see below)). The second command generates a series of .png-files: page_001.png, page_002.png ... page_0nn.png. Instead of the png256 driver, png16m can be used. On Windows systems the name of the ghostscript command is gswin32c or gswin64c (instead of gs).

If you wish a higher resolution of the .png images, change -r300 to -r600. The option -dTextAlphaBits=4 improves font antialiasing.²²

Details on step 2 — Import .png images:

Open an empty presentation with LibreOffice Impress, adjust the appropriate slide format (e.g. 4:3), import the .png files with *Insert / Image* into consecutive empty slides.²³. The presentation can now be saved in the format of Impresss (.odp) or one of the Microsoft Powerpoint formats (.ppt or .pptx).

5.4 The pdfpc-viewer: add notes

The pdf-vierwer pdfpc for Linux²⁴ (see section 4.6) is a comfortable program which allows output of presentations to two monitors or a monitor and a beamer/projector. The normal presentation window is assigned to the beamer/projector, the other output for the presenter shows the actual slide, the next slide and an area for notes. As you are viewing a certain slide, press n to start editing a note. The editing mode is stopped with Esc. The text of these notes is stored in the file filename.pdfpc. Further information can be found in the man page.

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²¹1.e. "gs ... input.pdf" should be entered as one line and "gs ... temp.pdf" should be entered as a second line.

²²Details can be found in the documentation of gs https://www.ghostscript.com/doc/current/Use.htm

 $^{^{23}\}mathrm{Menu}$ structure of Libre Office v
6.4

²⁴https://pdfpc.github.io/

7 Version history

 $\mathbf{v0.1}$ (19.6.2004): initial version. $\mathbf{v0.2}$ (1.9.2004): page numbers now changed to footnotesize, left and right margins slightly changed, cenumerate and cdescription environments added. **v0.2a** (19.9.2004): Section "License" added to the documentation. **v0.2b** (17.10.2004): Documentation completed: description of the \distance{} command included. v0.2c (28.11.2004): Documentation completed (section 4.8 added). v0.2d (25.12.2004): Documentation completed (section 4.9 added). v0.2e (15.04.2005): Documentation completed (sections 4.9.2 and 4.7 added). v0.3 (12.08.2005): new (class) options for font selection: tmrfont (Times Roman), helvetfont (Helvetica), cmfont (Computer Modern), sansfont (Sans Serif: default). Documentation updated, sections 4.2 and 4.3 added. v0.4 (20.01.2018): New class options for different screen aspect ratios 4x3, 16x9, 16x10; "compressed" list environments modified; documentation completed: packages for use with elpres: enumitem (alternative list environments), overlays (overlay support: incremental slides); section 4.7 was completely rewritten. v0.4a (24.01.2018): Documentation completed. **v0.5** (12.07.2020): New class options: **nofonts** (no font selection) and **navisymb** (inserts a panel of symbols for navigation), new commands: auvimm (generates a link to external audio, video files), \fromlinktext and \totargettext (create links within a presentation). Documentation has been partly rewritten. v0.6 (19.08.2020): Access to the fancyhdr "header fields" (\lhead{}), \chead{} and \rhead{}) is now explicitly blocked. New command \slidetitlecolor{} for the text color of titles in psli-slides. New: style files for presentation schemes added. Documentation has been significantly completed: sections 3.5, 4.1, 4.10 and 5 added, section 2 on installation rewritten. v0.7 (20.02.2021): parts of the manual (this file) have been rewritten and an index has been included. The command \pagenrconst has been added. v0.8 (28.02.2021): Installation instructions have been updated in section 1 and detailed instructions were added to README.md. Section 5.2 was updated. A bug in the elpres...scheme.sty files was fixed (incorrect value for \labelitemiv). v0.9 (01.08.2021): New class option bulletsymb added, an archive elpres.tds.zip is added for ctan.org upload. v1.0: Class option ballsymb added, manual updated. v1.0.1: Corrected upload to ctan.org

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