Seminar demonstration files

Backgrounds

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1 – Introduction 3
2 – Solid backgrounds 9
3 – Gradient backgrounds 11
4 – Improved gradient backgrounds 15
5 – Composite backgrounds 21
6 – Backgrounds with external images 39

1 – Introduction

- The *full screen* backgrounds, which are the ones well suited for screen presentations, are managed by the `\SeminarNewSlideFrameBackground` and `\SeminarSlideFrameBackground` macros.[a]
- We can overlap several partial *backgrounds* with the 'fancybox' package (using it `\boxput` macro), calling the `\slideframe[*]` macro, eventually several times (see the **Seminar** documentation and FAQ). See examples on slide 26 and in the file sem-dem2.pdf
- We show here several kinds of backgrounds:
  - **solid** backgrounds,
  - **gradient** backgrounds, using the 'pst-grad' PSTricks package,
  - **gradient** backgrounds, using the 'pst-slpe' PSTricks package,
  - **composite** backgrounds, based on PSTricks graphics (you can obviously rather use the others (LA)TEX packages for algorithmic graphics),
  - backgrounds with **external images**.

[a] They are built on the model of the `\newslideframe` and `\slideframe` ones, which cannot be used for this goal (there is a design incompatibility in the management of the slide headers).

- You must generally take special care to several things:
  - the **size** of the files generated: using gradient backgrounds or simple composite ones, defined for instance using PSTricks, are not heavy. But using complex backgrounds (such the Sierpinski triangle fractals used here on one slide – as an exercise: don't use that for real usage![a]) or backgrounds including external images, can generate very huge files, depending of the compiler or converter used (this is easy to understand that if an external image is included repeatedly for each slide, it will produce heavy files – some tools, like VTEX, are able to load only one time such files),
  - the **time** to compile and print: complex backgrounds can obviously be also slow to compile and to print on the screen, specially with not recent processors.

[a] This slide alone is already 80 KB for the PostScript version, but 900 KB for the PDF one, which clearly show an abnormal behavior in the PDF converter.

Demonstration of backgrounds

- backgrounds are not well suited for the paper version of a presentation (at least for black and white printers): rather make these changes conditional and leave the default white background for the black and white versions, as here for the two preceding slides and for all the other **Seminar** demonstration files[a]:

```
\ifx\SeminarPaperVersion\AnswerYes
\else
  \renewcommand{\SeminarBackgroundSolidColor}{PaleGreen}
  \SeminarSlideFrameBackground{SeminarBackgroundSolid}
\fi
```

[a] This is just what we are **not** doing in this file, where we change the backgrounds for the paper version too, but for demonstration purpose only!

Demonstration of backgrounds

- If you choose a dark background, of course, you will need to change too the color for texts

```
\ifx\SeminarColorVersion\AnswerYes
  \color{yellow}
  \renewcommand{\SeminarBackgroundSolidColor}{NavyBlue}
  \SeminarSlideFrameBackground{SeminarBackgroundSolid}
\fi
```


Demonstration of backgrounds

- You could also want to change the color of the header and footer rules:

```
\ifx\SeminarColorVersion\AnswerYes
  \color{yellow}
  \let\headruleORIG\headrule
  \def\headrule{{\color{white}\headruleORIG}}
  \let\footruleORIG\footrule
  \def\footrule{{\color{white}\footruleORIG}}
  \renewcommand{\SeminarBackgroundSolidColor}{Sepia}
  \SeminarSlideFrameBackground{SeminarBackgroundSolid}
\fi
```


Demonstration of backgrounds

- And you may also need to change colors in some other places, as for instance for markers in the lists. Here we change those of the `dinglist` environments (extending here the original definition to introduce an optional color parameter):

```
\renewenvironment{dinglist}[2][black]
{\begin{list}{\textcolor{#1}{\ding{#2}}}{}}{\end{list}}

\begin{dinglist}[yellow]{\DingListSymbolA}
  \item First:
  \begin{dinglist}[red]{\DingListSymbolB}
    \item nothing
  \end{dinglist}
  \item Last
\end{dinglist}
```

- First:
  - nothing
- Last

2 – Solid backgrounds

☞ You only need to define the background color redefining the `\SeminarBackgroundSolidColor` macro (**Lavender** is the default) and to call the relevant `\SeminarSlideFrameBackground` macro:

```
1 \SeminarSlideFrameBackground{SeminarBackgroundSolid}
```


☞ To change the color, just redefine the `\SeminarBackgroundSolidColor` macro:

```
1 \renewcommand{\SeminarBackgroundSolidColor}{Turquoise}
2 \SeminarSlideFrameBackground{SeminarBackgroundSolid}
```


3 – Gradient backgrounds

☞ You only need to define the two extreme colors redefining the `\SeminarBackgroundGradientColorBegin` and `\...End` macros (**LightYellow** and **Gold** are the defaults) and to call the relevant `\SeminarSlideFrameBackground` macro:

```
1 \renewcommand{\SeminarBackgroundGradientColorBegin}{white}
2 \renewcommand{\SeminarBackgroundGradientColorEnd}{NavyBlue}
3 \SeminarSlideFrameBackground{SeminarBackgroundGradient}
```


☞ You can also change the middle point of the gradient redefining the `\SeminarBackgroundGradientMidPoint` macro (**0** is the default):

```
1 \renewcommand{\SeminarBackgroundGradientColorBegin}{white}
2 \renewcommand{\SeminarBackgroundGradientColorEnd}{NavyBlue}
3 \renewcommand{\SeminarBackgroundGradientMidPoint}{0.5}
4 \SeminarSlideFrameBackground{SeminarBackgroundGradient}
```

Demonstration of backgrounds

- You can also change the angle redefining the `\SeminarBackgroundGradientAngle` macro (**0** is the default)
- For the other available parameters, see the documentation of the 'pst-grad' package and set them with the `\psset` PSTricks macro.

```
\renewcommand{\SeminarBackgroundGradientColorBegin}{LemonChiffon}
\renewcommand{\SeminarBackgroundGradientColorEnd}{Gold}
\renewcommand{\SeminarBackgroundGradientAngle}{90}
\SeminarSlideFrameBackground{SeminarBackgroundGradient}
```


Demonstration of backgrounds


```
\renewcommand{\SeminarBackgroundGradientColorBegin}{LightBlue}
\renewcommand{\SeminarBackgroundGradientColorEnd}{NavyBlue}
\renewcommand{\SeminarBackgroundGradientAngle}{45}
\SeminarSlideFrameBackground{SeminarBackgroundGradient}
```


Demonstration of backgrounds

4 – Improved gradient backgrounds

- The 'pst-slpe' PSTricks package from Martin GIESE offer improved gradients, adding six new modes: **`slope`**, **`slopes`**, **`ccslope`**, **`ccslopes`**, **`radslope`** and **`radslopes`** (refer to the accompanying documentation).
- You only need to define the style of gradient used redefining the `\SeminarBackgroundGradientSlopeStyle` macro (**radslope** is the default) and to define the two extreme colors redefining the `\SeminarBackgroundGradientColorBegin` and `\...End` macros (**LightYellow** and **Gold** are the default) and to call the relevant `\SeminarSlideFrameBackground` macro:

```
\renewcommand{\SeminarBackgroundGradientColorBegin}{NavyBlue}
\renewcommand{\SeminarBackgroundGradientColorEnd}{white}
\renewcommand{\SeminarBackgroundGradientSlopeStyle}{ccslope}
\SeminarSlideFrameBackground{SeminarBackgroundGradientSlope}
```


Demonstration of backgrounds

- You can change the center by redefining the `\SeminarBackgroundGradientSlopeCenter` macro (**0.5 0.5** is the default):

```
\renewcommand{\SeminarBackgroundGradientColorBegin}{yellow}
\renewcommand{\SeminarBackgroundGradientColorEnd}{red}
\renewcommand{\SeminarBackgroundGradientSlopeStyle}{ccslopes}
\renewcommand{\SeminarBackgroundGradientSlopeCenter}{0.85 0.45}
\SeminarSlideFrameBackground{SeminarBackgroundGradientSlope}
```

Demonstration of backgrounds


```
\renewcommand{\SeminarBackgroundGradientColorBegin}{yellow}
\renewcommand{\SeminarBackgroundGradientColorEnd}{red}
\renewcommand{\SeminarBackgroundGradientSlopeStyle}{radslope}
\renewcommand{\SeminarBackgroundGradientSlopeCenter}{0.9 0.5}
\SeminarSlideFrameBackground{SeminarBackgroundGradientSlope}
```


Demonstration of backgrounds


```
\renewcommand{\SeminarBackgroundGradientSlopeStyle}{radslope}
\renewcommand{\SeminarBackgroundGradientColorBegin}{ForestGreen}
\renewcommand{\SeminarBackgroundGradientColorEnd}{PaleGreen}
\renewcommand{\SeminarBackgroundGradientSlopeCenter}{0.85 0.5}
\SeminarSlideFrameBackground{SeminarBackgroundGradientSlope}
```


Demonstration of backgrounds

☞ You can change the angle used by redefining the `\SeminarBackgroundGradientSlopeAngle` macro (**0** is the default):

```
\renewcommand{\SeminarBackgroundGradientColorBegin}{ForestGreen}
\renewcommand{\SeminarBackgroundGradientColorEnd}{PaleGreen}
\renewcommand{\SeminarBackgroundGradientSlopeStyle}{radslope}
\renewcommand{\SeminarBackgroundGradientSlopeAngle}{90}
\SeminarSlideFrameBackground{SeminarBackgroundGradientSlope}
```


Demonstration of backgrounds

☞ You can change the radius used by redefining the `\SeminarBackgroundGradientSlopeRadius` macro (**0** is the default)

☞ For the other available parameters, see the documentation of the 'pst-slpe' package and set them with the `\psset` PSTricks macro.

```
\renewcommand{\SeminarBackgroundGradientColorBegin}{green}
\renewcommand{\SeminarBackgroundGradientColorEnd}{PaleGreen}
\renewcommand{\SeminarBackgroundGradientSlopeStyle}{radslope}
\renewcommand{\SeminarBackgroundGradientSlopeRadius}{3}
\SeminarSlideFrameBackground{SeminarBackgroundGradientSlope}
```

Demonstration of backgrounds

5 – Composite backgrounds

- In this field, you are only limited by your **imagination**...
- Our examples will use here PSTricks, but you can use any (LA)TEX package for algorithmic graphics
- Here too, two macros `\SeminarBackgroundCompositeColorFirst` and `\...Second` are generally used to define the colors (**LightBlue** and **NavyBlue** are the chosen defaults)
- See,in the **`seminar.con`** file, the various macros defined (take care that some are easy to understood, but that others require an advanced level)

```
% We suppress the header and footer 'fancyhdr' rules
\renewcommand{\headrule}{}
\renewcommand{\footrule}{}

\SeminarSlideFrameBackground{SeminarBackgroundCompositeA}
```


Demonstration of backgrounds


```
\renewcommand{\SeminarBackgroundCompositeColorFirst}{LightGray}
\renewcommand{\SeminarBackgroundCompositeColorSecond}{DarkGray}
\SeminarSlideFrameBackground{SeminarBackgroundCompositeA}
```


Demonstration of backgrounds


```
% We suppress the header and footer 'fancyhdr' rules
\renewcommand{\headrule}{}
\renewcommand{\footrule}{}

\renewcommand{\SeminarBackgroundCompositeColorFirst}{LightGray}
\renewcommand{\SeminarBackgroundCompositeColorSecond}{DarkGray}
\SeminarSlideFrameBackground{SeminarBackgroundCompositeB}
```


Demonstration of backgrounds


```
\renewcommand{\SeminarBackgroundCompositeColorFirst}{PaleGreen}
\renewcommand{\SeminarBackgroundCompositeColorSecond}{LightBlue}
\SeminarSlideFrameBackground{SeminarBackgroundCompositeC}
```

Demonstration of backgrounds


```
\renewcommand{\SeminarBackgroundCompositeColorFirst}{white}
\renewcommand{\SeminarBackgroundCompositeColorSecond}{Gold}
\SeminarSlideFrameBackground{SeminarBackgroundCompositeD}
```


Demonstration of backgrounds

☞ Note that we can override several backgrounds, calling several times the `\slideframe[*]` macro and using the `\boxput` one from the 'fancybox' package (see the **Seminar** documentation and FAQ):

```
\newslideframe{SeminarBackgroundConfidential}{%
\boxput{%
  \rput{30}{%
    \scalebox{9}{%
      \textcolor{LightGray}{Confidential}}}}{#1}}
\slideframe{SeminarBackgroundConfidential}
```

Confidential

Demonstration of backgrounds


```
\renewcommand{\slideleftmargin}{3.8cm}
\addtolength{\slidewidth}{-\slideleftmargin}

\renewcommand{\SeminarBackgroundCompositeColorFirst}{Gold}
\renewcommand{\SeminarBackgroundCompositeColorSecond}{LemonChiffon}
\SeminarSlideFrameBackground{SeminarBackgroundCompositeE}
```


Demonstration of backgrounds


```
\renewcommand{\slideleftmargin}{3.8cm}
\addtolength{\slidewidth}{-\slideleftmargin}

\color{yellow}

\renewcommand{\SeminarBackgroundCompositeColorFirst}{black}
\renewcommand{\SeminarBackgroundCompositeColorSecond}{NavyBlue}
\SeminarSlideFrameBackground{SeminarBackgroundCompositeE}
```

Demonstration of backgrounds


```
% We suppress the header and footer 'fancyhdr' rules
\renewcommand{\headrule}{}
\renewcommand{\footrule}{}

\renewcommand{\SeminarBackgroundCompositeColorFirst}{Gold}
\renewcommand{\SeminarBackgroundCompositeColorSecond}{LemonChiffon}
\SeminarSlideFrameBackground{SeminarBackgroundCompositeF}
```


Demonstration of backgrounds


```
% We suppress the header and footer 'fancyhdr' rules
\renewcommand{\headrule}{}
\renewcommand{\footrule}{}

\renewcommand{\slideleftmargin}{1.7cm}
\addtolength{\slidewidth}{-\slideleftmargin}

\renewcommand{\SeminarBackgroundCompositeColorFirst}{Gold}
\renewcommand{\SeminarBackgroundCompositeColorSecond}{white}
\SeminarSlideFrameBackground{SeminarBackgroundCompositeG}

\newslideframe{SeminarBackgroundTitle}{%
\boxput(-1.12,0){%
  \rput{-90}{%
    \textcolor{Orange}{%
      \Large
      \TextTurn{Seminar\ \ demonstration\ \ files}}}{#1}}}
\slideframe{SeminarBackgroundTitle}
```


Demonstration of backgrounds


```
% Generally, do not do it like that, as the paper version must have
% no background...

\color{white}

\ifx\SeminarPaperVersion\AnswerYes
  % Header/footer initialization
  \def\SeminarStandardHeaderFooterDemos{%
  \date{\HLz{\FileDate}}%
  \SeminarStandardHeaderFooter
    {\LARGE\HLf{Demonstration of \MakeLowercase{\FileInfoB}}}
    {\HLf{\FileInfoA{} -- \FileInfoB}}
    {\HLz{Version \FileVersion{} -- }}
    {\HLz{\FileAuthor}}}
\else
  % Header/footer initialization
  \def\SeminarStandardHeaderFooterDemos{%
  \date{\HLf{\FileDate}}%
  \SeminarStandardHeaderFooter
    {\LARGE\HLe{Demonstration of \MakeLowercase{\FileInfoB}}}
    {\HLy{\FileInfoA{} -- \FileInfoB}}
    {\HLf{Version \FileVersion{} -- }}
    {\HLe{\FileAuthor}}}
\fi

```


Demonstration of backgrounds


```
% We suppress the header and footer 'fancyhdr' rules
\renewcommand{\headrule}{}
\renewcommand{\footrule}{}

\renewcommand{\slideleftmargin}{1.7cm}
\addtolength{\slidewidth}{-\slideleftmargin}

\renewcommand{\SeminarBackgroundCompositeColorFirst}{LightGray}
\renewcommand{\SeminarBackgroundCompositeColorSecond}{DarkGray}
\SeminarSlideFrameBackground{SeminarBackgroundCompositeG}
```

Demonstration of backgrounds


```
% We suppress the header and footer 'fancyhdr' rules
\renewcommand{\headrule}{}
\renewcommand{\footrule}{}

\fancyhead[R]{\rput(-5truemm,26truemm){\pscirclebox{\theslide}}}
\fancyhead[L]{%
\rput(52truemm,26truemm){%
  \LARGE\textbf{Demonstration of backgrounds}}
\rput{-90}(-18truemm,-75truemm){%
  \large\bfseries
  \TextTurn{Seminar\ \ demonstration\ \ files}}}
\fancyfoot[L]{%
\scriptsize
\rput(-17truemm,20truemm){%
  \shortstack{\FileDate\\Version \FileVersion\\\FileAuthor}}}

\renewcommand{\slidetopmargin}{40mm}
\renewcommand{\slidebottommargin}{0mm}
\renewcommand{\slideleftmargin}{30mm}
\setlength{\slideheight}{160mm}
\setlength{\slidewidth}{260mm}

```


Demonstration of backgrounds


```
\renewcommand{\SeminarBackgroundCompositeColorFirst}{green}
\renewcommand{\SeminarBackgroundCompositeColorSecond}{white}
\SeminarSlideFrameBackground{SeminarBackgroundCompositeH}
```

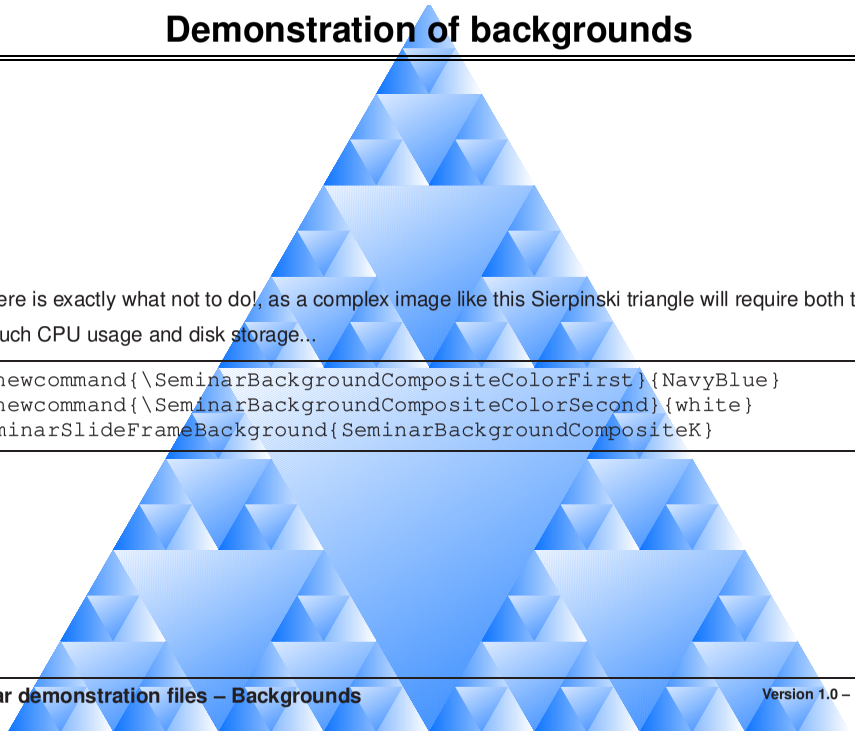

Demonstration of backgrounds


```
\renewcommand{\SeminarBackgroundCompositeColorFirst}{NavyBlue}
\renewcommand{\SeminarBackgroundCompositeColorSecond}{white}
\SeminarSlideFrameBackground{SeminarBackgroundCompositeI}
```


Demonstration of backgrounds


```
\renewcommand{\SeminarBackgroundCompositeColorFirst}{Orange}
\renewcommand{\SeminarBackgroundCompositeColorSecond}{LemonChiffon}
\SeminarSlideFrameBackground{SeminarBackgroundCompositeI}
```

```
\renewcommand{\SeminarBackgroundCompositeColorFirst}{PaleGreenB}
\SeminarSlideFrameBackground{SeminarBackgroundCompositeJ}
```

- Here is exactly what not to do!, as a complex image like this Sierpinski triangle will require both too much CPU usage and disk storage...

```
\renewcommand{\SeminarBackgroundCompositeColorFirst}{NavyBlue}
\renewcommand{\SeminarBackgroundCompositeColorSecond}{white}
\SeminarSlideFrameBackground{SeminarBackgroundCompositeK}
```


6 – Backgrounds with external images

- Of course, we can include all the external image files that we want
- As already explained, just take care to the size of the resulting file produced, and do not use this kind of backgrounds if the compiler or converter that you use is not able to load such file only one time and to reuse it
- The `\SeminarBackgroundImageFile` macro allow to define the name of the file and, if needed, the `\SeminarBackgroundImageAngle` macro allow to change the angle used (**0** is the default)
- The file formats accepted obviously depend of the compiler or converter used (outside EPS files, some accept also JPEG, PNG, TIFF, etc. formats)

```
% We have redefined too the header, footer and section entries...

\renewcommand{\SeminarBackgroundImageFile}{MonetISL}
\SeminarSlideFrameBackground{SeminarBackgroundImage}
```

Claude Monet
Impression, soleil levant (1872)
Musée d'Orsay, Paris


```
\renewcommand{\slideleftmargin}{3.5cm}
\addtolength{\slidewidth}{-\slideleftmargin}

\renewcommand{\SeminarBackgroundImageFile}{RedBG}[a]
\SeminarSlideFrameBackground{SeminarBackgroundImage}
```

[a] Image taken in the distribution of AxPoint, an XML based Presentations tool by Matt SERGEANT (see `http://axpoint.axkit.org/`).

Demonstration of backgrounds


```
\renewcommand{\SeminarBackgroundImageFile}{Matisse1}
\SeminarSlideFrameBackground{SeminarBackgroundImage}
```

Henri Matisse

Nu couché

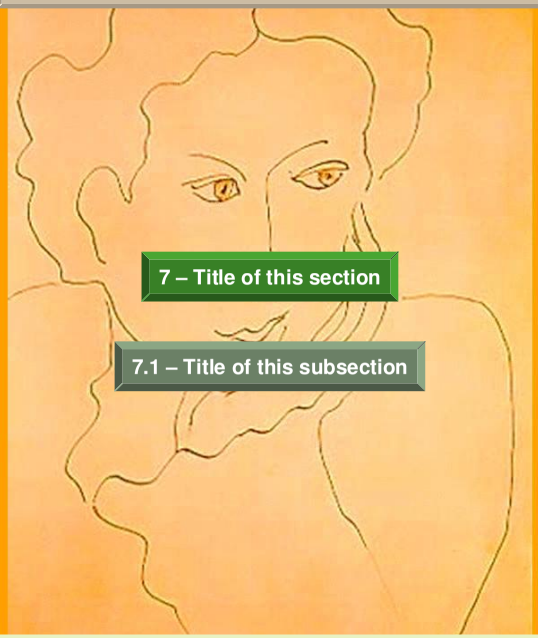
Demonstration of backgrounds


```
\renewcommand{\SeminarBackgroundImageFile}{Matisse2}
\SeminarSlideFrameBackground{SeminarBackgroundImage}
```

Henri Matisse

Femme accoudée (1936)

Demonstration of backgrounds



7 – Title of this section

7.1 – Title of this subsection

Demonstration of backgrounds

8 – Title of this section

8.1 – Title of this subsection

```
\renewcommand{\SeminarBackgroundImageFile}{G1Marble}
\SeminarSlideFrameBackground{SeminarBackgroundImage}
```

Demonstration of backgrounds


```
\renewcommand{\SeminarBackgroundImageFile}{G2Marble}
\SeminarSlideFrameBackground{SeminarBackgroundImage}
```


Demonstration of backgrounds


```
\renewcommand{\SeminarBackgroundImageFile}{PkMarble}
\SeminarSlideFrameBackground{SeminarBackgroundImage}
```


Demonstration of backgrounds


```
\bfseries

\renewcommand{\SeminarBackgroundImageFile}{Swirl1}
\SeminarSlideFrameBackground{SeminarBackgroundImage}
```


Demonstration of backgrounds


```
\color{yellow}

\renewcommand{\SeminarBackgroundImageFile}{Swirl2}
\SeminarSlideFrameBackground{SeminarBackgroundImage}
```

Demonstration of backgrounds


```
\color{white}

\renewcommand{\SeminarBackgroundImageFile}{Ripple}
\SeminarSlideFrameBackground{SeminarBackgroundImage}
```


Demonstration of backgrounds


```
\color{white}

\renewcommand{\SeminarBackgroundImageFile}{Ripple}
\renewcommand{\SeminarBackgroundImageAngle}{90}
\SeminarSlideFrameBackground{SeminarBackgroundImage}
```