Beamer template

Using pandoc, knitr, Weave, etc…

Timothée Poisot Université de Montréal

April 3, 2018

MAIN GOALS

1. Easy generation of slides
2. Integration with `R` and `Julia`
3. Looks nice

FONTS AND SPACING

The document uses the Noto family – `https://www.google.com/get/noto/`

Main body	Noto Sans (or Serif)
Maths	Noto Sans
Code	`Noto Mono`

The linespread value has been increased to about 1.3

SERIF FONT THEME

The default font theme is sans serif. You can change the `template/pl.tex` first line to:

```
@@ -1,4 +1,4 @@
-\documentclass[11pt, compress, aspectratio=1610]{beamer}
+\documentclass[11pt, compress, aspectratio=1610, serif]{beamer}

\usetheme{pl}
```

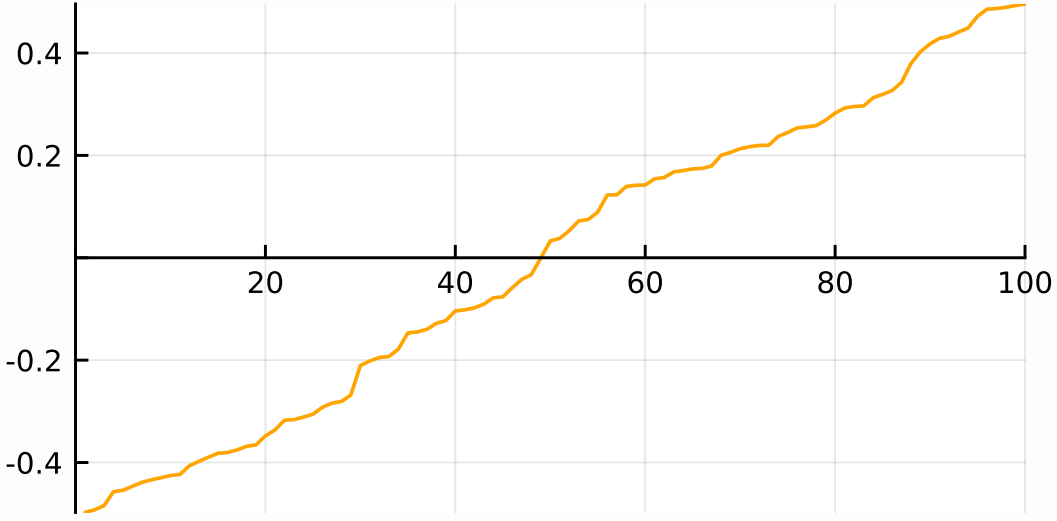
COLORS

The structure elements are in green, inline code is in `blue`, and alerted text in orange.

The background is off-white: it will *look* like it's white, but with less eyestrain.

The foreground is not-quite-black either.

PID	COMMAND	%CPU	TIME	#TH
25645	top	16.3	00:02.03	1/1
25642	bash	0.0	00:00.01	1
25641	login	0.0	00:00.02	2
25634	mdworker	0.0	00:00.07	3
25624	mdworker	0.0	00:00.14	4
25591	mdworker	0.0	00:00.14	3
25571	com.apple.iC	0.0	00:00.31	5
25414	installd	0.0	00:00.52	2
25366	com.apple.We	0.0	00:00.07	4


0.4
0.2
-0.2
-0.4
20
40
60
80
100

The Input family of fonts has some support for Greek and mathematical symbols:

$$\frac{1}{N}\frac{\mathrm{d}}{\mathrm{d}t}N = N\left(r - \alpha N\right)$$

You can use `\alert` within math blocks.

§ 1

Using sections

Every section will have a small band with the background image.

They are first-level headers in markdown:

```
# Section

## Slide-title

Slide content
```

CODE HIGHLIGHTING

There is a customized color scheme for code highlighting.

```
α = 2.0
b, c = ″abc″, ′c′
# This code does nothing (useful)
for i in 1:10
  rand()
  @elapsed println(″i:\t$i″)
end
```

We can also use unicode characters.

VISUAL COUNTER

The circle next to the title of each slide moves forward at every slide (including the section changes).

It is a useful visual key for how much slides are left.

OUTPUT

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Morbi sollicitudin nisi vitae lorem interdum, eget elementum quam elementum. Curabitur quis leo eu metus consequat ultricies. Curabitur sit amet convallis risus. Cras vel arcu id risus efficitur commodo et eget velit. Curabitur consequat eleifend magna, ut ultricies lorem scelerisque eu. Mauris faucibus neque sit amet est elementum, suscipit placerat est interdum. Phasellus sed convallis est. Nunc fermentum convallis odio eget gravida. Duis venenatis dictum tempor.

BACKGROUND IMAGE

The background image is generated from the `makebackground.jl` file. It's the k-nearest neighbour graph of a series of random points.

The file is `background.png` – it can be replaced by any file as long as the replacement file is in the 16:10 format (for example, a 1600 × 1000 image).

FINAL SLIDE

The final slide displays the background picture.

This is to avoid the awkward “Switching to black” thing that happens when there are no slides left.

§ 2

Reproducible documents

IT’S IN THE MAKEFILE

Documents `slides.Jmd` and `slides.Rmd` will be detected.

They will be converted to `slides.md` using either `R`/`knitr` or `Julia`/`Weave.jl`.

§ 3

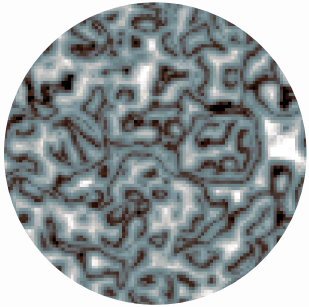
Specific commands

CROPPED IMAGES

The `roundpicture` command will display a picture, resized to fit into a circle:

```
\roundpicture{images/nb.png}{Optional text}
```

Note that the image must be a square.



PLAIN SLIDE

This will create a plain slide:

```
## {.plain}

\plain{This is large text on the background image.}
```

Note that the text within the `\plain` command must be LaTeX.

This is large text on the background image.