# Beampy a tool to make simple presentation

Hugo Chauvet

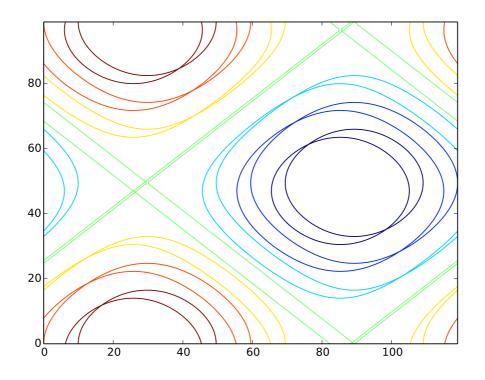
#### Text

#### Use LaTeX to render text and equation

$$\sqrt{10}$$

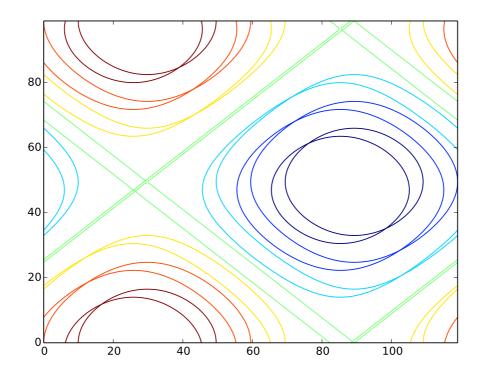
```
slide()
title("Text")
text(r\"""Use LaTeX to render text and equation \\ $$\sqrt{10}$$\""")
```

# Figure



```
slide("Figure")
figure("./svg_anims/test_0.svg", width="500")
```

# Svg animation



```
slide('Svg animation')
animatesvg("./svg_anims/", width="500")
```

#### Video

```
slide('Video')
video("./test.webm", width="500", height="294")
```

#### Group and columns

This is a test for a long text in a column style.

```
\sum_{i=0}^{10} x_i
```

```
slide('Group and columns')
colwidth=350
with group(width=colwidth,
    height=doc. height-100,
    x="1cm", y="1.8cm",
    background="#000") as g1:
    text("""
    This is a test for
    a long text in a
    column style.
    s \sim (i=0)^{10} \times i 
    align="center",
    width=colwidth-20,
    color="#ffffff")
```

## Relative positioning

```
youpi x=1cm, y=0.1
youpi x=1cm, y=+0.5cm
youpi x=1cm, y=+0.5cm
```

```
youpi x=+1cm, y=+0.5cm
youpi x=-0, youpi x=+1.5cm,
y=+0.5cm y=-0
```

```
slide('Relative positioning')
text("youpi x=1cm, y=0.1", x="1cm", y=0.1)
text("youpi x=1cm, y=+0.5cm", x="1cm", y="+0.5cm")
text("youpi x=1cm, y=+0.5cm", x="1cm", y="+0.5cm")

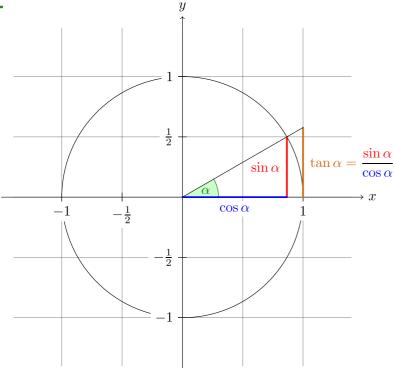
text("youpi x=+1cm, y=+0.5cm", x="+1cm", y="+0.5cm")
text(r"youpi x=-0, \\ y=+0.5cm", x="-0", y="+0.5cm")
text(r"youpi x=+1.5cm,\\ y=-0", x="+1.5cm", y="-0")
```

## Using element's anchors

left of e0 central element [e0] right of e0

anchors available: top, bottom, center, right, left

#### Tikz



The angle  $\alpha$  is 30° in the example  $(\pi/6 \text{ in radians})$ . The sine of  $\alpha$ , which is the height of the red line, is

$$\sin \alpha = 1/2$$
.

By the Theorem of Pythagoras we have  $\cos^2 \alpha + \sin^2 \alpha = 1$ . Thus the length of the blue line, which is the cosine of  $\alpha$ , must be

$$\cos \alpha = \sqrt{1 - 1/4} = \frac{1}{2}\sqrt{3}.$$

This shows that  $\tan \alpha$ , which is the height of the orange line, is

$$\tan \alpha = \frac{\sin \alpha}{\cos \alpha} = 1/\sqrt{3}.$$

http://www.texample.net/tikz/examples/tutorial/

```
slide()
title('Tikz')
p = tikz(r\""" ....[TIKZ LINES].... \""")
t = text(r"\href{http://www.texample.net/tikz/examples/tutorial/}
{http://www.texample.net/tikz/examples/tutorial/}",
x="center", y=p.bottom+0.11)
```

## Bokeh plot

```
slide()
title('Bokeh plot')
from bokeh.plotting import figure as bokfig
import numpy as np
p = bokfig(height=300, width=600)
x = np.linspace(0, 4*np.pi, 30 )
y = np.sin(x)
p.circle(x, y, legend="sin(x)")
figure(p, y="+5px", x="center")
```