

Literate package development with Julia and Pluto.jl

“The exploration is the implementation is the documentation.”

A notebook as a package?

This notebook lets us explore and implements as *reusable* package at the same time!

Here comes the pdf of a normal distribution with mean μ and standard deviation σ :

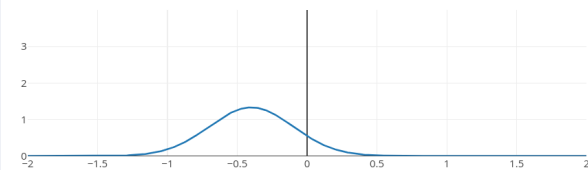
$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right)$$

gaussian (generic function with 1 method)

```
gaussian(x;  $\mu$ ,  $\sigma$ ) = 1/(\sigma * sqrt(2 $\pi$ )) * exp(-(x -  $\mu$ )^2 / 2 $\sigma$ ^2)
```

Pick μ :

Pick σ :



```
# in Julia REPL:  
julia> using Gaussian  
julia> Gaussian.gaussian(3.,  $\mu$  = 4.,  $\sigma$  = 1.)  
0.24197072451914337
```

- Crashcourse on Julia and Pluto.jl notebooks
- How to develop packages in Julia
- Create your first literate Julia package as a notebook

Access the GitHub repository:
t1p.de/literate-pluto

