The `framed` beamer template

And another one...

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Overview

- Part 1: *Examples*
- Part 2: *Plots*

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Hello!

About the template

This is another try at a more subtle beamer template.

An itemized list looks as follows:

- Item 1
- Item 2

The continuous-time Fourier Transform of a signal $x(t)$ is defined as

$$X(\omega) = \int_{-\infty}^{\infty} x(t) e^{-j\omega t} \, \mathrm{dt} \tag{1}$$

A Theorem in a Box

Theorem

The Bessel functions of the first kind $J_v(x)$ are the solutions to the Bessel differential equation

$$x^2 \frac{d^2 y}{d x^2} + x \frac{d y}{d x} + \left(x^2 - v^2\right) y = 0. \tag{2}$$

The proof is omitted.[1]

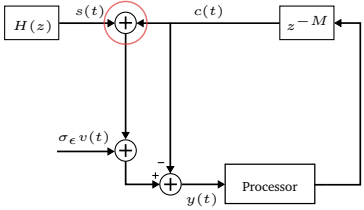
I am sure Shannon did not use this fact[2]

[1] This is a footnote explaining why the proof was omitted.

[2] C. E. Shannon, "A mathematical theory of communication," *The Bell System Technical Journal*, vol. 27, no. 3, pp. 379–423, Jul. 1948, ISSN: 0005-8580. DOI: 10.1002/j.1538-7305.1948.tb01338.x.

Figures and columns

We can include graphics just like we are used to, for example this block diagram of a noise-canceling system:

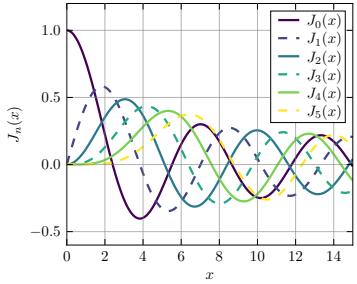


Columns work great in a 16:9 aspect ratio

- Add more text
- Even more information

This is a Block in a Column

We can also add varblocks to bring the point even more across!



Part 1: *Examples*

Part 2: *Plots*

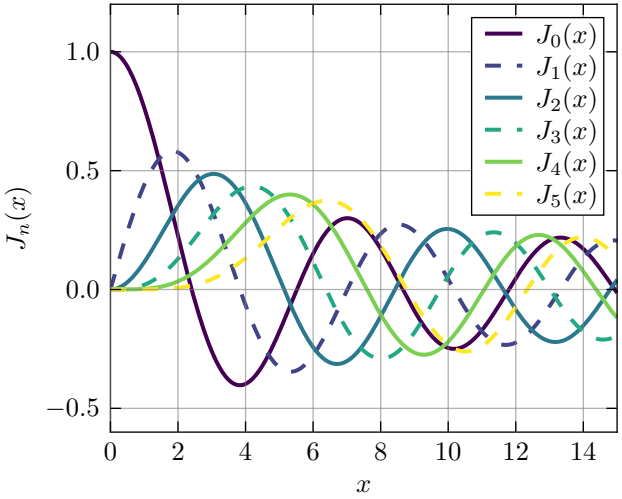
Plotting is fun!

On the following pages, we include two examples on how to include plots:

1. A PDF plot
2. A PGF/TikZ plot

PDF plots are nice, but nothing beats the native look of PGF/TikZ. The source code to generate both plots can be found in `extra/plot_bessel.py`

A Plot



References I

[1] C. E. Shannon, “A mathematical theory of communication,” *The Bell System Technical Journal*, vol. 27, no. 3, pp. 379–423, Jul. 1948, ISSN: 0005-8580. DOI: 10.1002/j.1538-7305.1948.tb01338.x.