# Recurring LATEX commands

### Ignacio-Iker Prado-Rujas

 $July\ 18,\ 2022$ 

#### Abstract

This document intends to gather common LATeX commands or functionalities that I tend to forget too fast.

#### Contents

1	Including one or more images	2
2	Simple TikZ diagram	3
3	Moving a table into the margin	3
4	Multirows and multicolumns	3
5	Including an algorithm	4
6	Including an equation	4
7	Including the ORCID as a link	5

### 1 Including one or more images

Simple single figure:

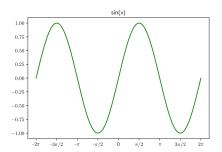


Figure 1: A nice figure.

Several figures as a table with a single caption:

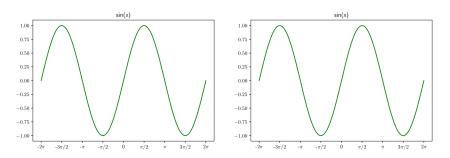


Figure 2: Another nice figure.

To use subfigures and subcaption, need to \usepackage{subcaption}:

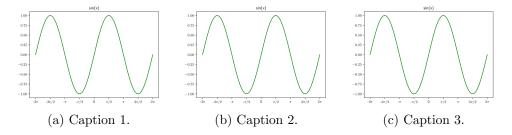


Figure 3: Three simple graphs

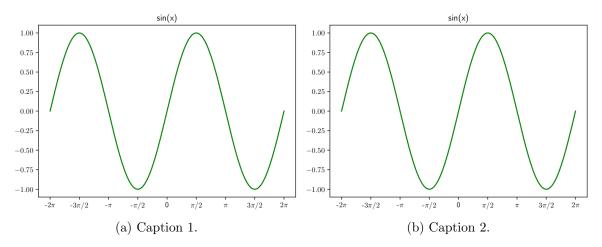


Figure 4: Two simple graphs moved into the margins.

#### 2 Simple TikZ diagram

\usepackage{pgf}
\usepackage{tikz}
\usetikzlibrary{arrows,automata,matrix,positioning,shapes,shapes.geometric}
%\usepackage{xcolor}



### 3 Moving a table into the margin

Table 1: Original table position.

$\mathbf{What?}$	Why?	How?	Where?
This.	That.	This other thing.	That other thing that is long.
That.	This.	That other thing that is long.	This other thing.

Reference extent of text (\hrule):

#### 4 Multirows and multicolumns

\usepackage{multirow}
\usepackage{makecell}

Table 2: A nicer table.

What?	Why?	How?	Where?
This.	That.	This other thing.	That other thing that is long.
That.	This.	That other thing that is long.	This other thing.

Table 3: A cool table.

What?		Context			
_	w nat:	Why?	How?	Where?	
-		That.	This other thing.	That other thing.	
	Common	That.	This other thing.	That other thing.	
	thing	This.	That other thing.	This other thing.	
		That.	This other thing.	That other thing.	

Useful for LATEX tables: link.

### 5 Including an algorithm

\usepackage{algorithm}
\usepackage{algpseudocode}

```
Algorithm 1 Sample algorithm.
 1: for all x \in X do
        for all y \in Y do
 2:
            if x == 0 then
 3:
 4:
               x \leftarrow y
            else
 5:
               y \leftarrow x
 6:
 7:
            end if
            store(x, y)
 8:
        end for
10: end for
```

Sample line reference in algorithm 1: see line 2.

### 6 Including an equation

\usepackage{amsmath}

$$S = \left(1 - \frac{\text{error}_{\text{proposed}}}{\text{error}_{\text{reference}}}\right) \cdot 100 \tag{1}$$

## 7 Including the ORCID as a link

Make sure hyperref is available.

See Prado-Rujas<sup>©</sup>.