

“Hands on” L^AT_EX is not for me Examples

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Abstract

The purpose of this document is to provide some insight on how L^AT_EX works.

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1 Introduction

This document was constructed “on-the fly” during a talk about L^AT_EX.

2 Example of a Section Heading

Text included in this section. Sub-section

2.1 Example of a Sub-Section Heading

Text included in this sub-section. Sub-sub-section

2.1.1 Example of a Sub-Sub-Section Heading

Text included in this sub-sub-section. Paragraph

Example of a Paragraph Heading Text of paragraph. SubParagraph (do not mention this)

Inserting a numbered equation or mathematical expression is simple:

$$P(X = x) = \frac{\alpha x_m}{x^{\alpha+1}}, \alpha > 0, x \geq x_m > 0. \quad (1)$$

Inserting an inline mathematical expression is done by defining the expression within the text using `$expression$`. Example:

The Pareto probability density function is given by $P(X = x) = \frac{\alpha x_m}{x^{\alpha+1}}$, where $\alpha > 0$ and $x \geq x_m > 0$.

3 Numbering and Bulleting

Buy the following stuff:

- Fruit;
- Tuna;
- Cerveja...

The following three items are obligatory:

1. Vodka;
2. Xixa;
3. Cocaine.

Lists are created using the following environments:

- This is the first item;
- This is the other item;
- + This is the first item;

+ This is the other item;

List environments may be cascaded:

- The following sub-items are numbered:
 1. This is the first item;
 2. This is the other item;
- This is the other item;

4 Figure with Caption

This section only contains a figure.

Example 6 – Figure with Caption

```
\section{Figure with Caption}
\label{secFig}

This section only contains a figure.

\begin{figure}[!ht]
  % Requires \usepackage{graphicx}
  \centering
  \label{figExample}

  \includegraphics [width=0.85\textwidth]{fig1.pdf}\

  \caption{Caption of this very figure.}
\end{figure}
```

Figure 1: Caption of this very figure.

| | | |
|---|---|---|
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 | 9 |

Another table...

Table 1: Simple Table with Caption

| | | |
|---|---|---|
| 1 | 2 | 3 |
| 4 | 5 | 6 |

5 Cross-Referencing

I hereby state that expression (1), included in subsection 2.1.1, defines the probability density function of the Pareto distribution.

6 Citations

At this point of the presentation, I would like to bring your attention to the citation system and to paper [1, 2, 3]. You can even cite [1] in the captions of the figures or tables without any problems.

References

- [1] Jan W. Kantelhardt, Stephan A. Zschiegner, and Eva Koscielny-Bunde. Multifractal Detrended Fluctuation Analysis of Nonstationary Time Series. *Physica A: Statistical Mechanics and its Applications*, 316:87–114, December 2002.
- [2] Richard Lathrop and David L. Peterson. Identifying Structural Self - Similarity in Mountainous Landscapes. *Landscape Ecology*, 6(4):233–238, 1992.
- [3] Nataša B. Pavlović and Adolfo V. T. Cartaxo. Influence of tight optical filtering on long-haul transmission performance of several advanced signaling formats. *J. Lightwave Technol.*, 26(10):1339–1348, 2008.