

UNIVERSITÉ DE NANTES

IUT DE NANTES

Codes Correcteurs

Auteurs:

Brewal HENAFF
Cédric BERLAND
Nathan MARAVAL

Cours:

Modélisation
Mathématique

December 16, 2015



UNIVERSITÉ DE NANTES

1 Introduction

Ce projet à été réalisé dans le cadre de la formation en Modélisation Mathématique, en DUT Informatique à l'IUT de Nantes.

Il consiste a concevoir un programme permettant l'encodage d'un message binaire, puis par différentes methode que nous expliciterons plus tard, de le décoder et de corriger les possibles erreurs de transmission.

2 Some L^AT_EX Examples

2.1 Sections

Use section and subsection commands to organize your document. L^AT_EX handles all the formatting and numbering automatically. Use ref and label commands for cross-references.

2.2 Comments

Comments can be added to the margins of the document using the `todo` command, as shown in the example on the right. You can also add inline comments too:

This is an inline comment.

Here's
a com-
ment
in the
mar-
gin!

2.3 Tables and Figures

Use the table and tabular commands for basic tables — see Table ??, for example. You can upload a figure (JPEG, PNG or PDF) using the files menu. To include it in your document, use the `includegraphics` command as in the code for Figure ?? below.

2.4 Mathematics

L^AT_EX is great at typesetting mathematics. Let X_1, X_2, \dots, X_n be a sequence of independent and identically distributed random variables with $E[X_i] = \mu$ and $\text{Var}[X_i] = \sigma^2 < \infty$, and let

$$S_n = \frac{X_1 + X_2 + \dots + X_n}{n} = \frac{1}{n} \sum_i^n X_i$$

denote their mean. Then as n approaches infinity, the random variables $\sqrt{n}(S_n - \mu)$ converge in distribution to a normal $\mathcal{N}(0, \sigma^2)$.

2.5 Lists

You can make lists with automatic numbering ...

1. Like this,
2. and like this.

...or bullet points ...

- Like this,
- and like this.

We hope you find write \LaTeX useful, and please let us know if you have any feedback using the help menu above.