

TITLE OF THE THESIS

By

Nombre del Estudiante

A thesis submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

in

SPECIALTY

**UNIVERSITY OF PUERTO RICO
MAYAGÜEZ CAMPUS**

July, 2005

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Abstract of Dissertation Presented to the Graduate School
of the University of Puerto Rico in Partial Fulfillment of the
Requirements for the Degree of Master of Science

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July 2005

Chair: Advisor

Major Department: Department

This is the Abstract in English. You must write it in the file:

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Resumen de Disertación Presentado a Escuela Graduada
de la Universidad de Puerto Rico como requisito parcial de los
Requerimientos para el grado de Maestría en Ciencias

TITULO DE LA TESIS

Por

Nombre del Estudiante

Julio 2005

Consejero: Advisor

Departamento: Departamento

Este es el resumen en Español. Usted debe escribirlo en el archivo:

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ACKNOWLEDGMENTS

To Alberto Santana from Chemistry Department who gave me the first version of this template.

To Proffesor Manuel Jimenez (INEL) who push me in the world of \LaTeX .

My chairman Prof Domingo Rodriguez who encourage my work in \LaTeX .

Use the file: `Acknowledgments.tex`.

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LIST OF ABBREVIATIONS

FFT	Fast Fourier Transform.
DCFT	Discrete Chirp Fourier Transform.

LIST OF SYMBOLS

t	Time (seconds)
τ	Time between events.
μg	Micrograms.

CHAPTER 1

TITLE OF THE FIRST CHAPTER

The first chapter goes here.

1.1 First section of Chapter 1

En esta seccion haremos un ejemplo para ilustrar los temas que tiene esta plantilla.

Example. *Esto es una demostracion de un ejemplo.*

1.2 Example of paper citation

As mention the paper [\[1\]](#)

CHAPTER 2

TITLE OF CHAPTER 2

Here goes the text of Chapter 2.

2.1 Example of a figure

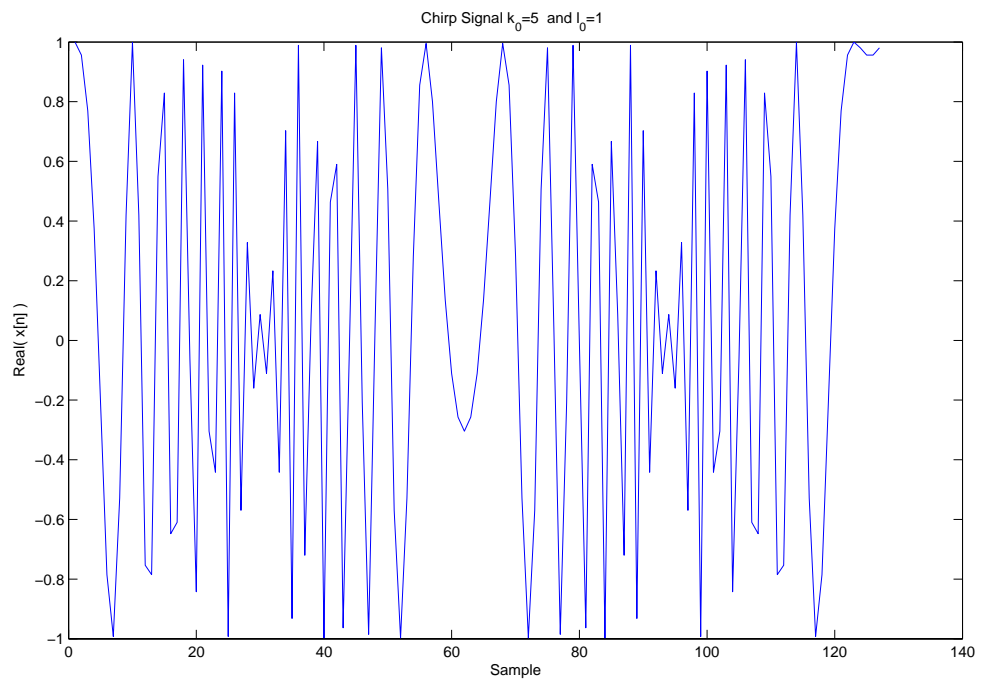


Figure 2–1: Chirp Signal

CHAPTER 3

TITLE OF CHAPTER 3

3.1 Just some about formulas

Use of `equation*`:

$$a = b$$

Use of `equation`:

$$a = b \tag{3.1}$$

Use of `split` and `equation`:

$$\begin{aligned} a &= b + c - d \\ &\quad + e - f \\ &= g + h \\ &= i \end{aligned} \tag{3.2}$$

Use of `multline`:

$$\begin{aligned} a + b + c + d + e + f + b + c + d + e + f + b + c + d + e + f \\ + b + c + d + e + f + b + c + d + e + f + i + j + k + l + m + n \end{aligned} \tag{3.3}$$

Use of `gather`:

$$a_1 = b_1 + c_1 \tag{3.4}$$

$$a_2 = b_2 + c_2 - d_2 + e_2 \tag{3.5}$$

Use of `align`:

$$a_1 = b_1 + c_1 \tag{3.6}$$

$$a_2 = b_2 + c_2 - d_2 + e_2 \tag{3.7}$$

Other uses for `align`:

$$a_{11} = b_{11} \qquad a_{12} = b_{12} \tag{3.8}$$

$$a_{21} = b_{21} \qquad a_{22} = b_{22} + c_{22} \tag{3.9}$$

Use of `flalign*`:

$$a_{11} = b_{11}$$

$$a_{12} = b_{12}$$

$$a_{21} = b_{21}$$

$$a_{22} = b_{22} + c_{22}$$

Use of `\equation` and `\split`:

$$H_c = \frac{1}{2n} \sum_{l=0}^n (-1)^l (n-l)^{p-2} \sum_{l_1+\dots+l_p=l} \prod_{i=1}^p \binom{n_i}{l_i} \cdot [(n-l) - (n_i - l_i)]^{n_i - l_i} \cdot \left[(n-l)^2 - \sum_{j=1}^p (n_i - l_i)^2 \right]. \tag{3.10}$$

Use of `\align` to align textual annotations:

$$x = y_1 - y_2 + y_3 - y_5 + y_8 - \dots \quad \text{by (3.14)} \quad (3.11)$$

$$= y \circ y^* \quad \text{by (3.5)} \quad (3.12)$$

$$= y(0)y \quad \text{by Axiom 1.} \quad (3.13)$$

Use of `\aligned` to control placement of inner alignments:

$$\alpha = \alpha\alpha$$

$$\beta = \beta\beta\beta\beta\beta \quad \text{versus} \quad \delta = \delta\delta$$

$$\gamma = \gamma \quad \eta = \eta\eta\eta\eta\eta\eta$$

$$\varphi = \varphi$$

Cases constructions:

$$P_{r-j} = \begin{cases} 0 & \text{if } r-j \text{ is odd,} \\ r! (-1)^{(r-j)/2} & \text{if } r-j \text{ is even.} \end{cases} \quad (3.14)$$

Use of `\smash` and `\vphantom` to control vertical size:

$$\begin{aligned} \left\langle u \left| \sum_{i=1}^n F(e_i, v) e_i \right. \right\rangle &= \sum_{i=1}^n F(e_i, v) \langle u | e_i \rangle \\ &= \sum_{i=1}^n \langle u | e_i \rangle F(e_i, v) \\ &= \sum_{i=1}^n \overline{\langle e_i | u \rangle} F(e_i, v) \\ &= F\left(\sum_{i=1}^n \langle e_i | u \rangle e_i, v\right) = F(u, v), \end{aligned}$$

CHAPTER 4

TITLE OF CHAPTER 4

This is the chapter 4.

4.1 How to write tables

Example. *A little table (see table 4-1) :*

Table 4-1: Benchmark Computational operations for the DCFT vs DFT

Samples	DCFT	DFT	Cooley-Tukey FFT
2	8	4	2
4	64	16	8
8	512	64	24
16	4096	256	64
32	32768	1024	160
64	262144	4096	384
1024	1.0737E9	1.04858E6	10240

CHAPTER 5

CONCLUSION AND FUTURE WORKS

L^AT_EX is a powerful tool for writing scientific documents.

This template is forever an unfinished work. Your contribution are important to make a better template. Any improvement could be sent to graduate studies office at the RUM.

APPENDICES

APPENDIX A

TITLE OF APPENDIX A

Appendix A goes here.

APPENDIX B

TITLE OF APPENDIX B

Appendix B goes here.

REFERENCE LIST

- [1] Xeng-Gen Xia. Discrete chirp-fourier transform and its application to chirp rate estimation. *IEEE Trans. Signal Processing*, 48:3122–3133, Nov 2000.

BIOGRAPHICAL SKETCH

Here goes the Biography.

Use the file: `Biography.tex`

TITLE OF THE THESIS

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Degree: Master of Science

Graduation Date: July 2005

This is the general Audience Abstract.

Use the file: `GeneralAudienceAbstract.tex`