Óscar's wonderful end of master's thesis

Óscar Iglesias González

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Óscar's Room Editions

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You can edit this page to suit your needs. For instance, here we have a no copyright statement, a colophon and some other information. This page is based on the corresponding page of Ken Arroyo Ohori's thesis, with minimal changes.

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Colophon

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The harmony of the world is made manifest in Form and Number, and the heart and soul and all the poetry of Natural Philosophy are embodied in the concept of mathematical beauty.

– D'Arcy Wentworth Thompson

Preface

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

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Characterization of sunflowers

2

2.1 NICS

Despite most people complain at the sight of a book full of equations, mathematics is an important part of many books. Here, we shall illustrate some of the possibilities. We believe that theorems, definitions, remarks and examples should be emphasised with a shaded background; however, the colour should not be to heavy on the eyes, so we have chosen a sort of light yellow.¹

1: The boxes are all of the same colour here, because we did not want our document to look like Harlequin.

2.1 NICS 3

2.2 Symmetry 3

2.2 Symmetry

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Interactions with saxitoxin

3

3.1 Enhancement factors

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3.1 Enhancement factors 5

Mathematics and Boxes

4.1 Theorems

Despite most people complain at the sight of a book full of equations, mathematics is an important part of many books. Here, we shall illustrate some of the possibilities. We believe that theorems, definitions, remarks and examples should be emphasised with a shaded background; however, the colour should not be to heavy on the eyes, so we have chosen a sort of light yellow.¹

Definition 4.1.1 *Let* (X, d) *be a metric space. A subset* $U \subset X$ *is an open set if, for any* $x \in U$ *there exists* r > 0 *such that* $B(x, r) \subset U$. *We call the topology associated to d the set* τ_d *of all the open subsets of* (X, d).

Definition 4.1.1 is very important. I am not joking, but I have inserted this phrase only to show how to reference definitions. The following statement is repeated over and over in different environments.

Theorem 4.1.1 A finite intersection of open sets of (X, d) is an open set of (X, d), i.e τ_d is closed under finite intersections. Any union of open sets of (X, d) is an open set of (X, d).

Proposition 4.1.2 *A finite intersection of open sets of* (X, d) *is an open set of* (X, d), *i.e* τ_d *is closed under finite intersections. Any union of open sets of* (X, d) *is an open set of* (X, d).

Lemma 4.1.3 A finite intersection^a of open sets of (X, d) is an open set of (X, d), i.e τ_d is closed under finite intersections. Any union of open sets of (X, d) is an open set of (X, d).

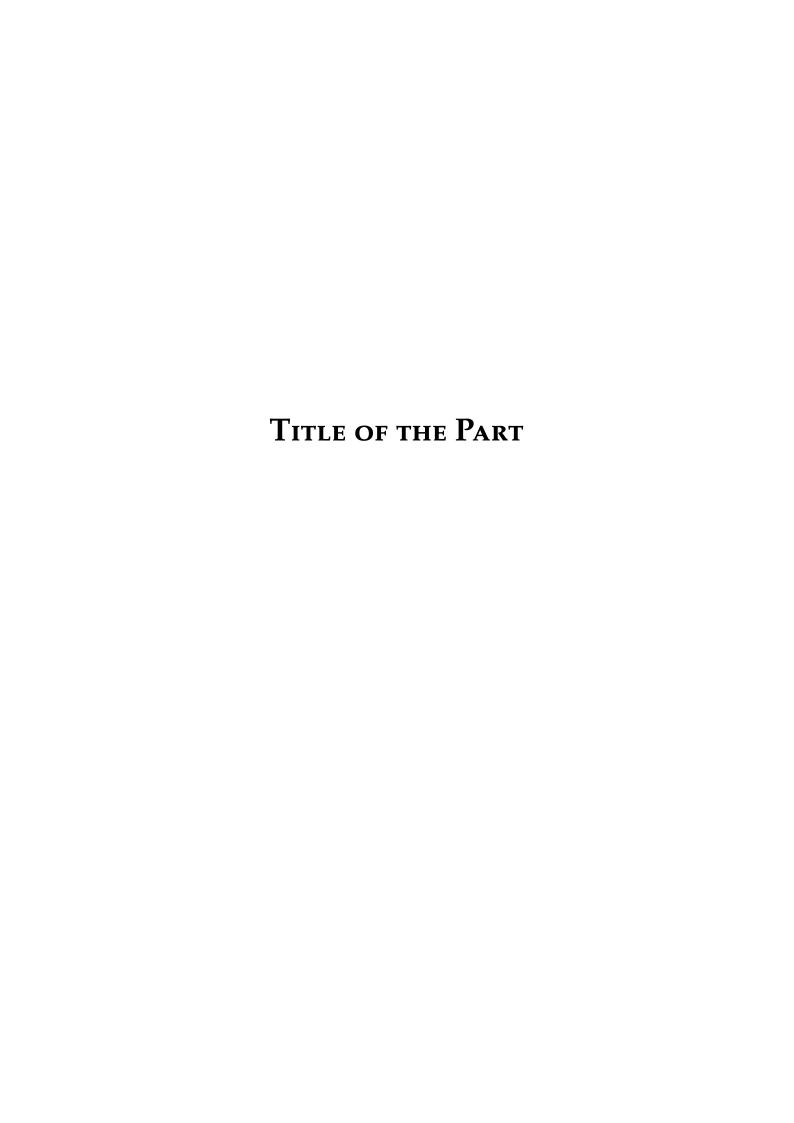
^a I'm a footnote

You can safely ignore the content of the theorems... I assume that if you are interested in having theorems in your book, you already know something about the classical way to add them. These example should just showcase all the things you can do within this class.

4.1 Theorems 7

1: The boxes are all of the same colour here, because we did not want our document to look like Harlequin.

You can even insert footnotes inside the theorem environments; they will be displayed at the bottom of the box.





Some more blindtext

A

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Greek Letters with Pronounciation

| Character | Name | Character | Name |
|-----------------------|-----------------------|------------------|---------------------------|
| α | alpha <i>AL-fuh</i> | ν | nu NEW |
| β | beta BAY-tuh | ξ , Ξ | xi KSIGH |
| γ, Γ | gamma GAM-muh | o | omicron OM-uh-CRON |
| δ , Δ | delta DEL-tuh | π , Π | pi <i>PIE</i> |
| ϵ | epsilon EP-suh-lon | ρ | rho ROW |
| ζ | zeta ZAY-tuh | σ, Σ | sigma SIG-muh |
| η | eta AY-tuh | τ | tau TOW (as in cow) |
| θ,Θ | theta THAY-tuh | v, Υ | upsilon OOP-suh-LON |
| ι | iota eye-OH-tuh | ϕ , Φ | phi FEE, or FI (as in hi) |
| κ | kappa <i>KAP-uh</i> | X | chi KI (as in hi) |
| λ , Λ | lambda <i>LAM-duh</i> | ψ , Ψ | psi SIGH, or PSIGH |
| μ | mu MEW | ω, Ω | omega oh-MAY-guh |

Capitals shown are the ones that differ from Roman capitals.