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December 2023

# Abstract

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abstract.

*THE **ABSTRACT** SECTION IS A REQUIREMENT AND SHOULD FIT IN A  
SINGLE PAGE AND NOT BE LONGER THAN 300 WORDS.*

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# Acknowledgements

*THE ACKNOWLEDGEMENT SECTION IS OPTIONAL AND SHOULD BE  
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## Author's declaration

Write the  
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declaration

*THE AUTHOR'S DECLARATION SECTION IS A REQUIREMENT AND SHOULD BE STATED APPROPRIATELY. IN PARTICULAR, IT NEEDS TO INCLUDE REFERENCES TO ALL PAPERS ALREADY PUBLISHED OR UNDER REVIEW, WITH A REFERENCE IN THE BIBLIOGRAPHY, AS WELL AS THE FOLLOWING TEXT:*

I declare that the work presented in this thesis, except where otherwise stated, is based on my own research carried out at the University of York and has not been submitted previously for any degree at this or any other university. Sources are acknowledged by explicit references.



# — 1 —

## Intro

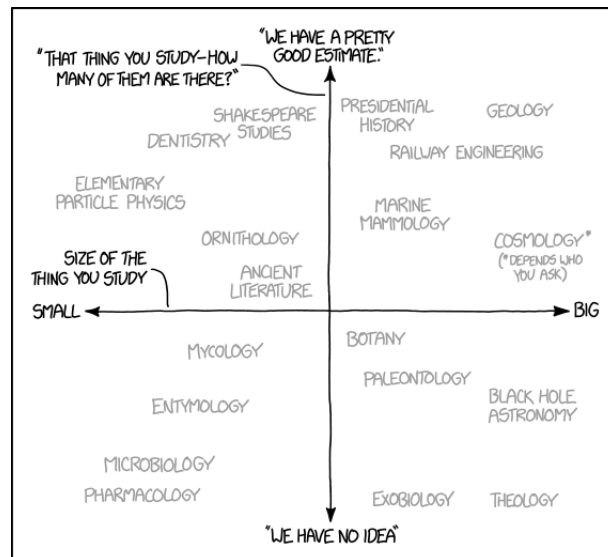
Write the  
chapters

A quick introduction to the content of the chapter with a reference to Section 1.1.1 below, a cross-reference to Chapter 2 and a citation of Knuth [1].

### 1.1 A FIRST SECTION

#### 1.1.1 WITH A SUBSECTION

Figure 1.1: *Research Areas by Size and Countedness* (from [xkcd.com](#))



Mathematicians give a third answer on the vertical axis, "That question is poorly defined, but we have a sub-field devoted to every plausible version of it."

AG

## — 2 —

# Begin

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## Heading on level 0 (chapter)

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### 3.1 HEADING ON LEVEL 1 (SECTION)

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### 3.1.1 HEADING ON LEVEL 2 (SUBSECTION)

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#### 3.1.1.1 Heading on level 3 (subsubsection)

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## 3.2 LISTS

### 3.2.1 EXAMPLE FOR LIST (ITEMIZE)

- First itemtext
- Second itemtext
- Last itemtext
- First itemtext
- Second itemtext

#### *3.2.1.1 Example for list (4\*itemize)*

- First itemtext
  - First itemtext
    - \* First itemtext
      - First itemtext
      - Second itemtext
    - \* Last itemtext
  - First itemtext
- Second itemtext

### 3.2.2 EXAMPLE FOR LIST (ENUMERATE)

1. First itemtext
2. Second itemtext
3. Last itemtext
4. First itemtext
5. Second itemtext

#### *3.2.2.1 Example for list (4\*enumerate)*

1. First itemtext
  - a) First itemtext
    - i. First itemtext
      - A. First itemtext

- B. Second itemtext
- ii. Last itemtext
- b) First itemtext
- 2. Second itemtext

### 3.2.3 EXAMPLE FOR LIST (DESCRIPTION)

**First** itemtext

**Second** itemtext

**Last** itemtext

**First** itemtext

**Second** itemtext

#### *3.2.3.1 Example for list (4\*description)*

**First** itemtext

**First** itemtext

**First** itemtext

**First** itemtext

**Second** itemtext

**Last** itemtext

**First** itemtext

**Second** itemtext

## — A —

### First appendix

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$$\bar{x} = \frac{1}{n} \sum_{i=1}^{i=n} x_i = \frac{x_1 + x_2 + \dots + x_n}{n}$$

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$$\int_0^\infty e^{-\alpha x^2} dx = \frac{1}{2} \sqrt{\int_{-\infty}^\infty e^{-\alpha x^2} dx} \int_{-\infty}^\infty e^{-\alpha y^2} dy = \frac{1}{2} \sqrt{\frac{\pi}{\alpha}}$$

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$$\sum_{k=0}^{\infty} a_0 q^k = \lim_{n \rightarrow \infty} \sum_{k=0}^n a_0 q^k = \lim_{n \rightarrow \infty} a_0 \frac{1 - q^{n+1}}{1 - q} = \frac{a_0}{1 - q}$$

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$$x_{1,2} = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-p \pm \sqrt{p^2 - 4q}}{2}$$

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Nunc quis urna dictum turpis accumsan semper.

$$\frac{\partial^2 \Phi}{\partial x^2} + \frac{\partial^2 \Phi}{\partial y^2} + \frac{\partial^2 \Phi}{\partial z^2} = \frac{1}{c^2} \frac{\partial^2 \Phi}{\partial t^2}$$

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## References

- [1] D. E. Knuth. *The T<sub>E</sub>X Book*. Addison-Wesley Professional, 1986.