



SJÄLVSTÄNDIGA ARBETEN I MATEMATIK

MATEMATISKA INSTITUTIONEN, STOCKHOLMS UNIVERSITET

title

av

first name last name

2017 - No 5

title

first name last name

Självständigt arbete i matematik 15 högskolepoäng, grundnivå

Handledare: supervisor

2017

Abstract

Your summary goes here

Contents

1	Introduction	9
2	Theorems and definitions	11
3	Tables and graphs	13
3.1	Tables	13
4	Insert a figure	15
4.1	Footnote	15
5	Conclusion	17
	References	19

1 Introduction

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

You can also use swedish letters ä ö å, Ä, Ö, Å. Unicode characters in general should work.

2 Theorems and definitions

Definition 2.1. This is a definition!

Theorem 2.2. *This is a theorem!*

To cross reference: By Theorem 2.2 we can say...

Lemma 2.3. *This is a lemma.*

Proof. Put here the proof of the lemma! □

Proof of Theorem 2.2. Another proof □

Corollary 2.4. *here is a corollary!*

If you want to write a beautiful equation in line do like that $e^{i\pi} + 1 = 0$. You might also want to write it on its own line

$$e^{i\pi} + 1 = 0.$$

If you think that you are going to need to cross reference your equation:

$$e^{i\pi} + 1 = 0 \tag{1}$$

and this is how you cross reference it (1) You might also want to have aligned equations on more lines.

$$e^{i\pi} + 1 = 0 \tag{2}$$

$$(\cos \theta)^2 + (\sin \theta)^2 = 1 \tag{3}$$

If you need to cross reference something in the bibliography, use the cite command: [Big02, p. 45]. The actual references are stored in a different file, called bibliographyFile.bib

You can reference most things you found useful, for example, books [Big02, Knu98, Las13]. Research articles and preprints, [AS19, She15]. Or another thesis, [Tef13].

You can also cite online sources. For example, the Encyclopedia of integer sequences, [Slo19], or a YouTube video [Baz18]. It is even possible to refer to a discussion you had with someone, [Bie16]. This is usually rare, it is better to thank them in the acknowledgements section (if they were helpful).

3 Tables and graphs

Here a few examples of tables and graphs.

3.1 Tables

Code	CdL	xxx	$T_{setup/lotto}$	$T_{lav/st}$	$T_{proc/pezzo}$	Quantity	T_{tot}
100	4	250	25	0,5	0,6	1	0,6
111	2	250	20	2	2,08	1	2,08
111	3	250	15	1,5	1,56	1	1,56
112	2	250	20	2,5	2,58	1	2,58
112	3	250	15	2	2,06	1	2,06
113	3	500	15	1	1,03	2	2,06
120	1	50	30	2	2,6	0,1	0,26
121	1	25	30	3	4,2	0,1	0,42
121	1	25	30	2,5	3,7	0,1	0,37

4 Insert a figure

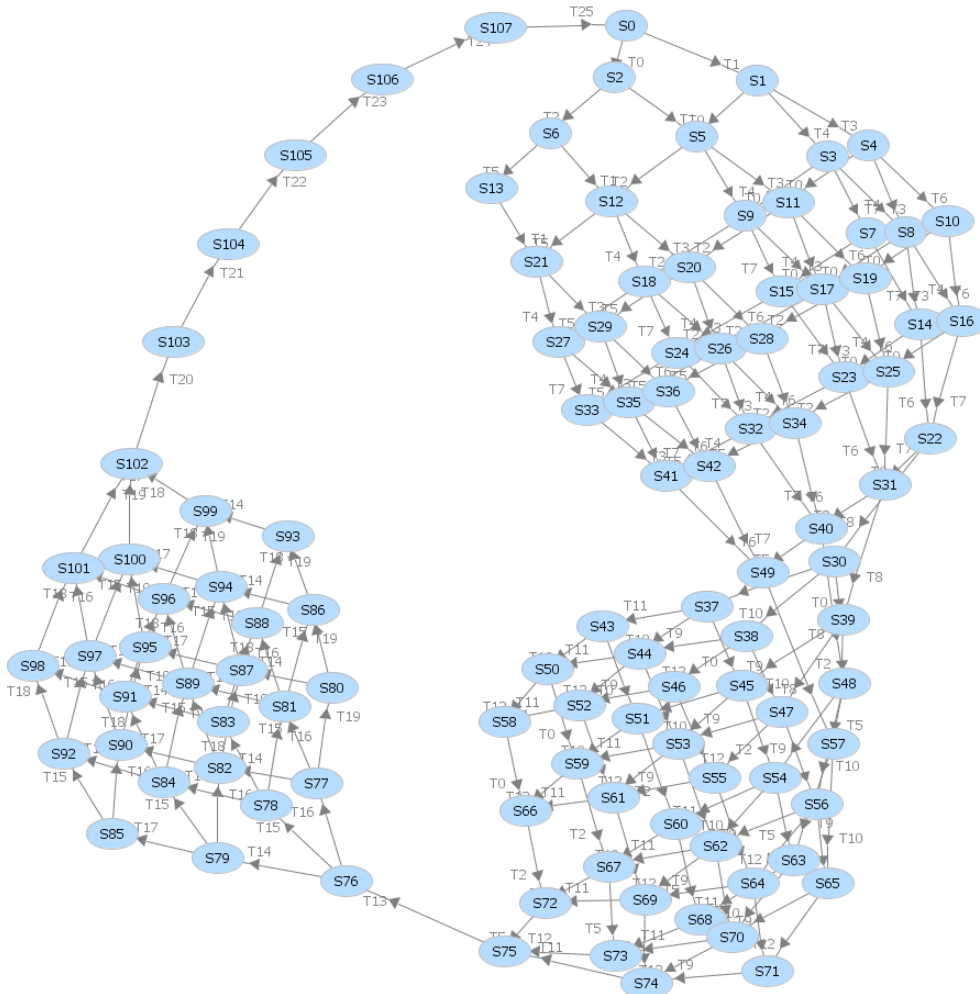


Figure 1: put the caption here

4.1 Footnote

You can create a footnote like this.¹

¹I created a footnote.

5 Conclusion

Remember the internet is full of places that can help you write a beautiful document with latex. Some example are overleaf.com and [stackoverflow](https://stackoverflow.com) just ask Google! In addition with an SU e-mail address you should be able to create (for free) a premium account on overleaf.com, so you do not need to download a tex editor and you will have the full latex distribution at your hand (if you are connected to the internet).

References

- [AS19] Per Alexandersson and Robin Sulzgruber. P-partitions and p-positivity. *International Mathematics Research Notices*, July 2019. doi:10.1093/imrn/rnz130.
- [Baz18] Trefor Bazett. Integers & rationals are both infinite but is it the same infinity? <https://www.youtube.com/watch?v=WQWkG9cQ8NQ>, 2018.
- [Bie16] Justin Bieber. Personal communication, October 2016.
- [Big02] Norman L. Biggs. *Discrete Mathematics*. Oxford University Press, second edition, 2002.
- [Knu98] Donald E. Knuth. *The Art of Computer Programming, Volume 3: Sorting and Searching*. Addison Wesley Longman Publishing Co., Inc., Redwood City, CA, USA, second edition, 1998.
- [Las13] Alain Lascoux. Polynomials. Online, September 2013. URL: <http://phalanstere.univ-mlv.fr/~al/ARTICLES/CoursYGKM.pdf>.
- [She15] Cass Sherman. Geometric proof of a conjecture of King, Tollu, and Toumazet. *arXiv:1505.06551*, 2015.
- [Slo19] Neil J. A. Sloane. The On-Line Encyclopedia of Integer Sequences. Online, 2019. URL: <https://oeis.org>.
- [Tef13] Nicholas James Teff. *The Hessenberg Representation*. Phd thesis, The University of Iowa, August 2013. doi:10.17077/etd.gsnc0lze.