

Problem Chosen

BCF

2020

MCM/ICM
Summary Sheet

Team Control Number

2001234

Title of you paper

From here, begin your summary

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1 Section example

Documents usually have some levels of sections to keep its contents organized. LATEX supports this type of organization and also customization of the sectioning and numbering. The command `\section{ }` marks the beginning of a new section, inside the braces is set the title. Section numbering is automatic and can be disabled.

The commands `\label` and `\ref{ }` are used for references. The `\label{ }` can be set either right before or after the `\section` statement. This also works on subsections and subsubsections. For example, section 1.

2 Citation examples

BibTeX provides for the storage of all references in an external, flat-file database. (BibLaTeX uses this same syntax.) This database can be referenced in any LaTeX document, and citations made to any record that is contained within the file. This is often more convenient than embedding them at the end of every document written. The BibTeX file for this document is biblo.bib. BibTeX file can be ceated by zotero.

To actually cite a given document is very easy. Go to the point where you want the citation to appear, and use the following: `\cite{keyword}`, where the `keyword` is that of the bibitem you wish to cite. When LaTeX processes the document, the citation will be cross-referenced with the bibitems and replaced with the appropriate number citation.

Citation examples: article [1], book [2], webpage [3, 4].

3 Equation example

A inline equation is shown as $E = m \cdot c^2$, a display equation with number is shown as equation (3.1)

$$E = m \cdot c^2 \tag{3.1}$$

and a display equation without number is shown as follow

$$E = m \cdot c^2$$

4 Items example

•

•

•

1.

2.

3.

5 Table example

A table example is shown as table 1.

Table 1: Table example

	AAAAAA	BBBBBB	CCCCCC	DDDDDD
XXX	1	2	3	4
YYY	5	6	7	8

6 Figure example

A simple figure example is shown as figure 1.



Figure 1: Figure example

For two independent side-by-side figures, you can use two minipages inside a figure environment. Here's an example, shown as figure 2 and 3.

TikZ and PGF are TeX packages for creating graphics programmatically. TikZ is build on top of PGF and allows you to create sophisticated graphics in a rather intuitive and easy manner. More about tikz, see

- TikZ and PGF: <http://www.texample.net/tikz>

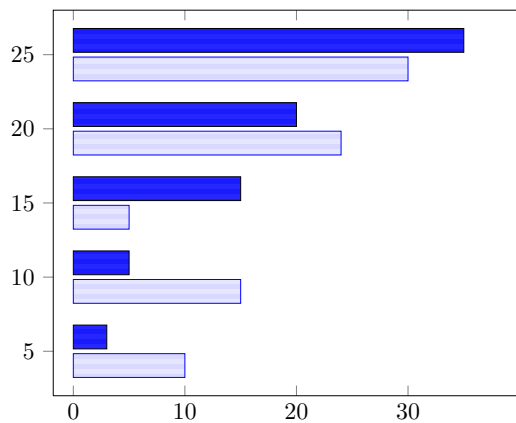


Figure 2: Figure example

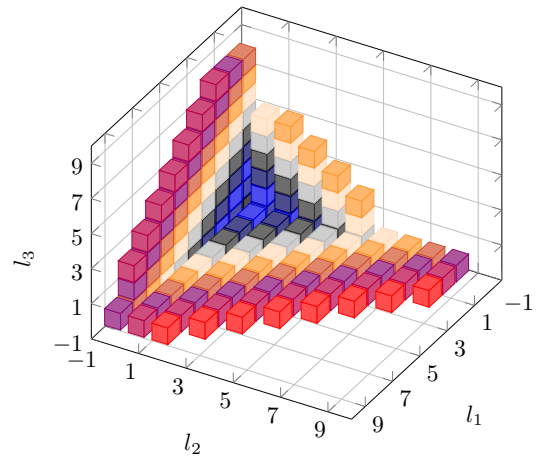


Figure 3: Figure example

- PGFPlots on Sourceforge: <http://pgfplots.sourceforge.net>
- PGFPlots examples: <http://pgfplots.net/tikz/examples/>

Here are a tikzpicture example (figure 4) and a pgfplots example (figure 5).

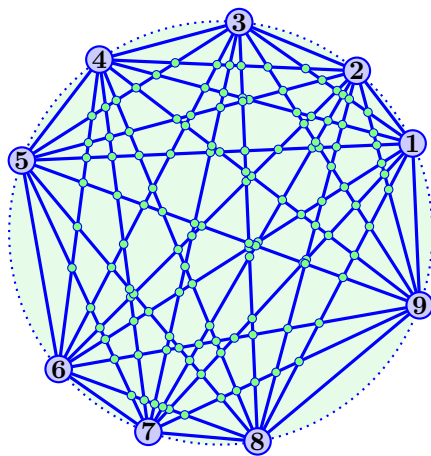


Figure 4: tikzpicture example.

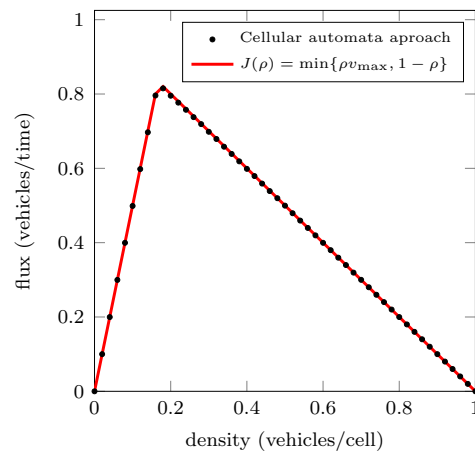


Figure 5: pgfplots example

References

- [1] Eric Beauregard, Jean Proulx, and D. Kim Rossmo. Spatial patterns of sex offenders: Theoretical, empirical, and practical issues. *Aggression and Violent Behavior*, 10(5):579–603, 2005.
- [2] Scotia J. Hicks and Bruce D. Sales. *Crime Analysis: From First Report to Final Arrest*. American Psychological Association, Washington, DC, 2006.
- [3] Spotcrime.com. <http://www.spotcrime.com>. Accessed on january 14, 2015.
- [4] Doboszczak, Stefan and Virginia Forstall. Mathematical modeling by differential equations, 2013. <http://www.norbertwiener.umd.edu/Education/m3cdocs/Presentation2.pdf>. Accessed on january 14, 2015.

Appendices

A Your First Appendix

From here, begin your first Appdendix... your can include some program script, such as matlab, c/cpp, python.

A.1 MATLAB example

```

1  %
2  %
3  %
4
5  n = 200;
6  Pltg = 5e-6;
7  Pgrw = 1e-2;
8  NW = [n 1:n-1];
9  SE = [2:n 1];
10 veg = zeros(n);
11 imh = image( cat(3, (veg==1), (veg==2), zeros(n)) );
12 for i=1:3000
13     num =
14         (veg(NW,:) == 1) + ...
15         (veg(:,NW) == 1) + (veg(:,SE) == 1) + ...
16         (veg(SE,:) == 1);
17     veg = 2*( (veg==2) | (veg==0 & rand(n)<Pgrw) ) - ...
18         ( (veg==2) & (num > 0 | rand(n)<Pltg) );
19
20     set(imh, 'cdata', cat(3, (veg==1), (veg==2), zeros(n)) );
21     drawnow
22 end

```

B Your Second Appendix

Table 2: Data example(Here we use long table)

AAAAAAAAAAAAAAAAAAAA	BBBBBBBBBBBBBBBBBBBB	CCCCCCCCCCCCCCCCCCCC
1		
2		
3		
4		
5		
6		
7		
8		
9		

AAAAAAAAAAAAAAAAAAAA	BBBBBBBBBBBBBBBBBBB	CCCCCCCCCCCCCCCCCCC
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		