Writing

October 3, 2006
Outline
Outline

- Style
Outline

- Style
- LaTeX
Outline

• Style
• LaTeX
• Publishing
Style
The hard part...

...is to write in such a way that the reader feels that, behind the text, there is a friendly person trying to communicate.
The basic question

Why should I read this?
To Entice the Reader

- Explain what is new
- Relate your work to previous work
- Relate your work to other areas
- State your main results clearly
Layout
Layout

- Abstract
Layout

• Abstract
• Introduction
Layout

• Abstract
• Introduction
• Proofs
Layout

• Abstract
• Introduction
• Proofs
• Conclusions, questions, prospects...
Layout, ctd.
Layout, ctd.

• The layout should make it easy to spot the key results
Layout, ctd.

- The layout should make it easy to spot the key results.
- This applies to both the overall structure, and to the individual sections.
Language
Language

• Some formality is required...
Language

• Some formality is required...

• ...but still try to write naturally
Language

- Some formality is required...
- ...but still try to write naturally
- Use as little notation as possible
Language

- Some formality is required...
- ...but still try to write naturally
- Use as little notation as possible
- What notation you use should be standard
It will help if:

• you do not write down *everything* you know, and

• you do not put everything in its most general form
Actual Writing

- You need outlines.
- Rewrite! Often.
LaTeX
Now
\[
(F_i)_{r,s} = \frac{1}{n} \frac{W_{r,u}}{W_{r,i}} \frac{W_{s,i}}{W_{s,u}}
\]
and therefore,
\[
M_{r,s} = \frac{1}{n} \frac{W_{r,u}}{W_{s,u}} \sum_i (\Theta(M))_{u,i} \frac{W_{s,i}}{W_{r,i}}.
\]
Hence
\[
nM_{r,s}(Y'_{s,r})_u = (\Theta(M)Y'_{s,r})_u,
\]
which implies the theorem.
Why?

It’s the only tool in town!
On What?

- unix/linux
- windows
- macs
Good news, bad news
Good news, bad news

• It’s free,
Good news, bad news

• It’s free,

• but it’s not easy
Distributions

- unix: use emacs as editor (there’s a web page that tells you how to get out of vi).

- windows: MiKTeX & WinEdt

- macs: TeXShop
• LaTeX takes the file you have produced with your editor; this normally instructs it to load certain packages and perhaps a file of macros that you have written.

• Your file specifies a document class (e.g., article, letter, beamer, book) and this determines the basic format. The packages provide modifications to the basic format.
Packages

• There are lots of them

• Do not use a package unless you know what it does, and you need the behaviour it offers in the paper you are writing
Don’t fight it
Don’t fight it

• LaTeX gets essentially all details of formatting right
Don’t fight it

- LaTeX gets essentially all details of formatting right
- Really!
Figures

- on windows and macs, use a drawing package to get a ps or pdf file
- on unix, the best solution is to have your co-author prepare them;
- s/he will use xfig (be grateful)
• When you have a version of your paper that you are ready to submit, post it on the Math ArXiv
Submission

• Some journals permit or encourage electronic submission. For details, go to their web page and follow their instructions carefully.

• Some journals do not. If you submit by snail mail, include a covering letter! This should state that you are submitting the enclosed paper for publication, and in which journal.
The response

• You should get a quick acknowledgment of your submission. If you do not, then get in touch at once.

• It could take up to a year for your paper to be refereed. If you have heard nothing from the journal after six months, it is reasonable to contact the journal and ask how things are going.

• Once you have submitted a paper, you must not submit it to a second journal until it is rejected, or you have written to the journal and formally withdrawn it.
Choosing a journal
Choosing a journal

- Where has related work appeared?
Choosing a journal

• Where has related work appeared?
• What does your supervisor say?
Choosing a journal

- Where has related work appeared?
- What does your supervisor say?
- Do not ask an editor!
Choosing a journal

- Where has related work appeared?
- What does your supervisor say?
- Do not ask an editor!
- Choose a strong journal
On rejection :-(

On rejection :-(

- You will usually be told some of the problems that caused your paper to be rejected
On rejection :-(

• You will usually be told *some* of the problems that caused your paper to be rejected

• If these can be fixed, fix them, and resubmit the paper to another a journal
On rejection :-) 

• You will usually be told *some* of the problems that caused your paper to be rejected

• If these can be fixed, fix them, and resubmit the paper to another a journal

• You may still get the same referee
On rejection :

- You will usually be told *some* of the problems that caused your paper to be rejected.

- If these can be fixed, fix them, and resubmit the paper to another journal.

- You may still get the same referee.

- You’ll gain nothing by arguing with the editor - referee’s are harder to find than papers.
On Acceptance :-}
On Acceptance :-)  

• Congratulations!
On Acceptance :-) 

- Congratulations!

- Usually the referees will have noted minor problems, and the editors will ask you to fix them and then resubmit.
On Acceptance :-) 

- Congratulations!

- Usually the referees will have noted minor problems, and the editors will ask you to fix them and then resubmit.

- Sometimes a referee's comment may be wrong. You may choose to ignore it, but when you resubmit you should explain clearly where you have not followed the advice offered, and why.
Almost Done

- I have some notes on writing on my web page, under `advice`
- There's some information about TeX there, too