3: Practicing with LaTeX

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Abstract

This is a homework assignment that will involve practicing with the simple commands we taught you in our introduction to LaTeX.

1 Assignment Overview

The point of this assignment is to create a nice pdf file containing some basic information using LaTeX. Please give it a title, your name, the date, and an abstract that states what you ate for breakfast this morning.

2 Working with Organization

For this assignment you will work with a series of disjointed commands, so please give everything its own section (you can probably guess where you should start a new section based off of where I have a new section in the instructions), and as appropriate subsection or subsubsection.

3 Part 1: Working with Bullets

3.1 Plain Bullets

Please make a list (2-5 things) of what you have enjoyed about class this semester. Example:

- I enjoy getting to give class advice and mentoring to students
- I enjoy getting to right silly tutorials and homeworks with cats.

3.2 Numbering

Please make a list (2-5 things) of what you have disliked about class this semester in order of rancor. Make sure your list is numbered and not bullet-ed!

1. I am horrible at typing (2-finger for life), especially when it's not my computer.

2. I don't know what to put... Butts

3. More butts

4 Part 2: Working with Equations

Please write out the last equation on this wiki page: `http://www.en.wikipedia.org/wiki/Euler-Lagrange_equation`

Commands that may be helpful here (remember to use the math environment!) are:

`\sum, \partial, \left, \right, \mu`

Your result should be:

$$\sum_{j=0}^{n}(-1)^j \partial^j_{\mu_1 \ldots \mu_j} \left(\frac{\partial L}{\partial f_{i,\mu_1 \ldots \mu_j}} \right) = 0 \tag{1}$$

Please also provide an explanation of what the $\mu_1 ... \mu_j$ implies,by explicitly writing $\mu_1 ... \mu_j$ within your explanation just like this.

5 Part 3: Working with Tables

Please make a table containing your first three favorite foods, bands, and IDL commands and give it a caption with your favorite genre of music (Bonus points for it being folk... Okay not really...). For example my table would be:

Favorite Foods	Favorite Bands	Favorite IDL Commands
Real Italian Anything	Glen Hansard	where()
Deer Jerky	Ben Howard	oplot
Poutine	Tycho	mrdfits()
-	The Real Tuesday Weld	-

Table 1: Favorite genre: Folk. Fourth band listed because I can and because you can't forget The Real Tuesday Weld. Check them out! Also check out poutine and don't let that new place on Durant fool you into thinking what they sell is poutine. If you want shitty cheese fries go to I.B's and save some cash.

You can add as many as you like but keep your table looking nice.

6 Part 4: Working with a Figure

Please include one of the ps files you have generated this semester (if you have not done that yet please do) in this section. Include a caption explaining what the ps file is and what you liked and disliked about the homework or tutorial that generated it.

Figure 1: Okay so this isn't a .ps its a shitty .jpeg of Dr. Steve Brule. Check it out (ya dingus)

7 Part 5: Working with Multiple Figures

Now that you've got a handle on a single figure you can probably imagine that its useful to put figures next to each other for comparison. Find your two favorite pictures (within bounds that won't result in you or I getting in shit) and put them in your document side by side. Scale them so they look pretty as shown below:

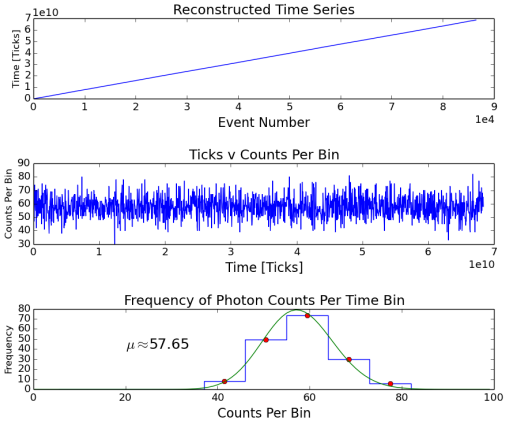

Figure 2: Pretty plot from the Optical Lab course this semester showing a Poisson Noise Distribution. Aww yiss.

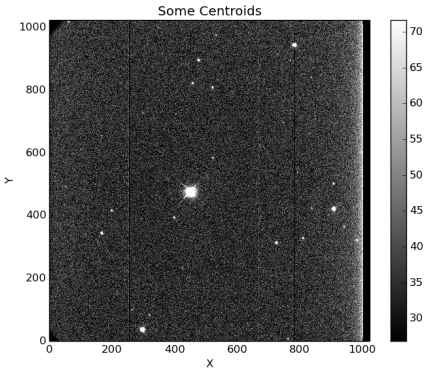

Figure 3: Bias-subtracted image data from the Nickel Telescope at Lick. The bright object is the asteroid Iris.