REALLY GREAT STUFF

Steven

Subject headings:

1. INTRODUCTION

This "paper" seeks to be an introduction to LaTeX or LaTeX, if you will. It also is intended to examine and begin to document the analysis techniques performed by me. Good LaTeXcommands are now going to be practiced. For example, I can *emphasise* important things. Like *you*. Or I can italicise *you* – really, it's limitless.

This should break into a new paragraph. I really do very much enjoy a good ampersand - like this one: &. Now isn't that something? Let's do some math! Math is fun! $x + y = z$ Well that was easy! $x' + y_b^5 \times \mu_g$ Betcha don't know what that means.

I will now type poetry[1]. This is *The Hunting of the Snark* by Lewis Carroll.

Fit the First: The Landing

Just the place for a snark, the Bellman cried
As he landed his crew with care
Supporting each man on the top of the tide
By a finger entwined in his hair

Just the place for a snark
I have said it twice - that alone should encourage
    the crew,
Just the place for a snark
I have said it thrice - what I tell you three times
    is true.

The crew was complete it included a Boots
A maker of Bonnets and Hoods
A Barrister brought to arrange their disputes
And a Banker to value their goods

That's all for now folks.

2. REAL INFORMATION

Components of the analysis performed on the Virgo images:

- Fields & General Overview

- Initial Masking

    1. Bright Star (hand) Mask
    2. OBJmasking
    3. Ring Median Subtraction & OBJmasking
    4. Threshold Brightness Masking

- SExtractor

    1. Overview (seg/aper/masks)

[1] Do you have to cite poetry if you got it from your memory?

    2. Selection of Paramters
    3. Positive/Negative Noise Analysis

- Statistical Analysis on Masked Images

    1. newspikemode - Mode Histograms
    2. Field Comparison with Feld./Aguer. N_{PNe}/arcmin^2 and L$_{sun,v}$
    3. Selections of Boxes for Comparing N_{PNe} and <I> of Pixels
    4. Monte Carlo-ing the Error Bars for Box Selection Methods

3. DIFFUSE LIGHT IN VIRGO'S CORE

oh yeah...that's what this is about
well *you*'re diffuse light in Virgo...
three blank lines is the same as one.
Seems to me we need more math here. $\Upsilon = \frac{\sqrt{x+y}}{\sqrt{x}+\sqrt{y}}$ Looks like a palm tree doesn't it? Υ We can make a whole forest of them here: $\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon$ Welcome to the Jungle.

Our fearless 'hero' (aka Mr. Zeta) is currently lost in the forest of palm trees:
$\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon$
$\Upsilon\Upsilon\Upsilon\zeta\Upsilon\Upsilon\Upsilon\Upsilon$
$\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon\Upsilon$
$\Upsilon\Upsilon\Upsilon$

Lucky for *Him* (ok, you guessed it, it's Jesus), we can make an array for him to escape to.

First, however, it is necessary to take the cosine of the log of the sum of all real numbers between here and Timbuktu:

$$\cos(\lg(\sum_{here}^{Timbuktoo} \Re))$$

Great, now we can get onto *His* array.

cow	low	μ	bull	bowl
bake	crust	π	pastry	pasty
tire	air	ψ	Pa	Kgpm3

If you like tabs, you must begin using them

Then you can
        make them connect
                various lines
                    together

Well arrays and tabs are pretty, but I *want* borders and lines. Tabular, dude! Let's be a malicious little brat and force LaTeXto break the page somewhere in this area. I can get pretty scary when it comes to scaring computer programs... and a page break is a pretty easy thing to be scared into. C'mon, LaTeX, "Boo!".

Totally time for a tabular table now!

telescopes	Steven	12"	12.5"	Jason
education	Steven	HS	PhD	Mihos
# cats	Steven	~ 2	3	Mihos
wife	Steven	no	soon	Mihos
is cool	Jason	yes	yes	Steven

I

AM

GOD

I WANT LaTeX TO DO WHATEVER I SAY. BE SMALL CAPS, MY CHILD *GO ALL SLANTY* WHAT ABOUT LOWER SMALLS, EH? `Pretend you're a typewriter!` LOWER UPPER SMALL CAPS

Didn't you always wish you could type this awesome thing: ¶. How much do you weigh? Can you measure it in £?

This is good for sun subscripting: $\odot$, and odot happens to be a familiar acronymn, too.

In the beginning there was the line | and the line was good. Then it got tired and leaned over a little \. Lucky for it there was another line close by leaning the other way that could help it stand up straight $\wedge$. However, then the evil triangleright came along $\triangleright\wedge$ and stole away the balance. "Whatever shall I do?" cried the line as it wiggled around $\wr$. "I must go slay the triangleright with my dagger †!" And so he went off.

"Which way did the triangleright go?" the line | asked the ghost of a ghost $\cap$. "Boo" said the GoaG $\cap$. "AMALGA-MATE!!!" cried the blood type $\ominus$ that happened to be wandering around. Then the triangleleft $\triangleleft$, the sister of the triangleright, sprung out from behind a square cup $\sqcup$, wielded her double dagger ‡, and in a short time it was all over for the poor line. Now, the line was nothing more than a sliced up mess, looking something like $\aleph$. He went that way $\Rightarrow$ and soon fell

into a large circle $\bigcirc$. As he sunk, he became nothing more than a small dot $\odot$. Then he was gone, and the circle became a diamond $\diamond$.

We return to our regularly schedule programming:

THIS IS GOD. I am speaking verbatim and LaTeX will obey.

```
ha. anything and everything i type goes exactly
if
i
hit
enter
a
lot
then so it goes. and    spacing    is    real
watch this. look at those slashes! no commands!
enough!
```

Back at the ranch, we are about to insert a linebreak here wow look at that huh? Here are three linebreaks in a row

...And we're back! Cool huh?

I made a command to fix any time you spell my name in lowercase without an 'n' on the end. "Hey Steve? What's up?" "hi steven" "yo, steveo"

I just can't get enough of this LaTeX stuff! Let's work on delimiters!

$$\left(\begin{array}{c} \left\langle\begin{array}{c} \Updownarrow \; \textit{Direction} \\ \textit{Is} \\ \textit{Lost} \end{array}\right\rangle \\ \textit{More is Lost} \\ \textit{Lost is Gone} \\ \textit{Gone is Forever} \end{array}\right\} 42 \left\{\begin{array}{c} \textit{Life} \\ \textit{Everything} \end{array}\right.$$