

# Weekly Report

## 6/16-6/21

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### Phleets Galore

I'm sure that you are sick of hearing about it but hear it is again. We were succesful in creating phleets in the lab. I learned a little bit of perl and bash shell scripting to get the job done. In addition I was able to create a win32 phleet in my basement which has allowed me to do further caveMathematica testing. The only barrier to creating win32 phleets (albeit slow ones) in the lab is the firewall. I do not know if Jonathon will let us take it down, however.

### caveMathematica

I'm sure that you read it in the e-mail but this is where we are with caveMathematica:

- CAVE/CUBE: The MathLink connection starts in listen mode but the `dex caveMathematica <ip-address>` does not reach Mathematica, halting evaluation.
- Standalone mode: Works great! There are some problems with color-rendering but there are a some reasons for that. The main one is, when the color function depends on the function itself, it will not color. Perhaps, SZG sends back info on hoew points are changing, messing up the color function. In Mathematica, moving an object means moving its world so all points remain the same.
- Other phleets:I was able to test in another proper phleet in my basement. The MathLink connection starts on both sides. When I send information, it does not render until I quit the input simulator. I still do not know why.

Thankfully, "porting" a normal Mathematica script so it renders in SZG is not that hard. You just add a display function.

### Other Randomness

I am learning about Cascading style sheets, so hopefully my website will look and function better than before. The reasoning behind it is very similar to the reasoning behind using Tex. By using css, you abstract (for the most part) how the webpage looks from what the content of the webpage is. Also, when you want to make a change in the webpage, you can have your website set up so that everything is global for all pages within one site, as opposed to changing it piecemeal. In addition, my Tex vocabulary is growing immensely every time I use it, so now documents are not taking 6-7 hours to write. In these endeavors, I often find myself using that evil known as Vim more and more. I can

not even believe I am telling you this

### **Impressions**

I am pleased with the way things are going in the lab this past week. Will and I have a good dynamic and we seem to knock stuff out when we work together. You can also see other groups forming in the lab. I wish that we could have more CAVE/CUBE time but alas, it can not be so. I am excited about the upcoming week. Hopefully, I will have some source code and documentation to guide in what I should accomplish with caveMathematica this summer.