Computational Modeling Progress Proposal

As of right now, I believe that the most pertinent issue with the computational modeling code repository is the lack of cleanliness in the code. Most of the software capabilities are already present, but long-standing bugs and other issues have made the code close to unworkable. In order to get the repository to a state where another engineer can take over my role, I would like to clean up these issues and rebuild the project in a manner that will be easier for someone else to understand. Specifically, I will fix and rebuild the following components:

* **FusorVis.java** – This file, with its 800+ lines contain the vast majority of the visualization code. I will break apart the file into separate files, all with less than 200 lines, before Winter break.
* **The XML file reader** – While interesting because it allows for the modeling of cylinders and tori with arbitrary accuracy, a number of unworkable bugs make this system worthy of replacement. In its place, I will use only STL models. This will allow us to remove the following files:
  + ComponentType.java
  + Cylinder.java
  + GridComponent.java
  + Sphere.java
  + TorusSegment.java
  + Wire.java
  + XMLParser.java
  + printXMLShapes.java
  + MathJSONObject.java

This will include removing the wire system that I spent a lot of time on. While sad, I believe that the advantages lent to us by the presence of this system do not justify its complexity. Hopefully, this will take no more than two weeks.

* **Renaming** – A number of files have inaccurate names, due partially to my lack of knowledge about proper terms for physics concepts. I will rename:
  + Vector.java
  + CalcThread.java
  + euler.java

Together, these improvements should bring the project back to a state where it is once again workable.