Self-reflection

Brean made the code that shows a visual for a single particle in a constant magnetic field. While she was working on that, Laura did research on the equations of dipole magnetic field and any other major contributions to a particle’s motion in the Earth’s magnetic field other than the Lorentz force. We decided that is the only significant contribution we’ll focus on coding. From that background research on the equations of Earth’s dipole magnetic field, Laura made a code that computes the vector of the dipole magnetic field at different points in space in two coordinate systems - cartesian and magnetic latitude coordinates. Brean is making the dipole magnetic field into a visual. Next week the goal will be to combine the codes to show a particle moving in a dipole magnetic field. We would also like to compare the motion of particles in the auroral and sub-auroral zones to be able to discuss the differences between regular auroras and STEVE. We still feel that the work is divided very equitably.

Questions we have for you are the following. Regularly VPython stops showing the visuals. Why might this be? What can we do differently so that stops happening? When it happens we have to restart the kernel which just gets really annoying that we have to do that every couple of minutes. Also, when we turn jupyter notebooks into pdfs via latex the visuals/images/graphs don’t show up, which is kind of pointless. Do you know how to fix that?