

Use of Matlab Particle Orbit Demo Code

Course 22.611j Plasma Learning Aid

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1 What is it?

A simple matlab code which calculates particle orbits in a selection of specified magnetic and electric fields. Written by Swedish plasma physicists as a teaching aid. They have graciously made it publically available.

Nothing concerning this code is required for the course. I personally find it less useful conceptually than would be optimum, but you might enjoy playing around with it.

2 How to?

Type in to the terminal the stuff in fixed width font below:

1. Log in to athena
2. `add 22.611j`
3. `cd /mit/22.611j/particle_orbits/jaun`
4. `add matlab`
5. `matlab`
6. In the matlab window that will pop up: `spm`
7. Tinker with the buttons and watch the plots.

Further instructions are in the html file `matlab_spm.html` in the directory.