Project for Computational Physics Course 2010

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▽ Project Proposal

This is a Semester project for computational physics course.I want to choice a topic from Electromagnetism.The details are given below.

Main object:

To find out the trajectory of a charged particle in a magnetic field and electric field.

1

The first i want to see the simple motion of a charged paticle in a constant uniform magnetic field.That is if a particle enter inside the field with some initial velocity .It may be parallel or perpendicular to the field.

2

The trajectory of that particle in electric field.

3

If magnetic and electric field are applied both. Then what will I do?

4

The special case may be perpendicular direction.

5

And i also want to plan to do for a paticle which may be constrained motion. Again if the field is not homogeneous then what will i do?