

Paired Project Problem - Starting your pair project

Who are the partners in this team?

The partners are Ruth Gregory and David Pham.

What are you and your partner proposing to do?

The proposition is to model the motions of particles in a particle accelerator.

What area of E&M will you be conducting original calculations for?

The particle motion is controlled by electric and magnetic fields, which we will conduct original calculations from.

What source material are you drawing from?

The source materials we are drawing from is an experiment, “Computer Lab: Intro to madx, Lattices and Dispersion” from Dr. Satogata of Jefferson Laboratory. Also, Synergia, a Python package from Fermilab. As well as the Accelerator Modeling Program from Berkeley Laboratory.

What has been done so far and what are you going to do?

What has been done so far is that Gregory has made advancements in this topic from the first project in this course. We are going to attain more information on the motions of particles from other publications and format it as a presentation for the course in a form of a poster, with some media that illustrates the simulations.