

Hello, everyone. My final year project is Development of a C++-based user-interface for a plasma simulation tool. It's actually develop a program to do pre-processing of Micro Discharge 2D model's simulated data.

Firstly I will talk why we need this program. Plasimo supports transient and steady-state simulations of plasma sources and displays them in one, two and three-dimensional geometries. It's powerful for plasma researchers because they can observe the changing process of micro plasma directly. However, the simulation process is irreversible, you can't go back to check data and geometries. In addition, the numerical output data are saved in 68 different text files and it's hard to match them to particular properties especially for new users. Therefore, a user-friendly interface is needed to solve these problems.

Now, I will briefly demonstrate my work. I call this program Plasimo Display Assistant, once you open it, it is the main dialog. Users can quick study how to use program by clicking these two buttons. Now, lets load pdp_md2d's data, this program will display the final output information of the opening data at the beginning, and then we go to the operation dialog, here is the main menu, this program have 2 functions, one is matching particular text files and plasma properties and then generate 2D geometries based on it. Another is generate line chart based on the data in the history.out file.

If you are interesting in my project, feel free to see me in the bench inspection, here is my timetable. Thanks for you watching!