Hi Professor

Time elapse quickly, This week I mainly works on testing the mode conversion code, the experiment is still hold off due to the power supply problem.

Nowadays, I am writing the mode conversion draft, which include the algorithm I used in the code and basic benchmark with theory results. I am going to calculate the CTS polarization in BEST tokamak and the phase shift of TIRTIP diagnose under magnetic shear condition, give an estimate of influence by magnetic shear. After that ,I will try to combine the energy equation with Maxwell equation ,than we could possible analysis the heat deposition of EMW .

The replace component in power supply is still under testing by company ,If the company tell us the they don’t have the correct module of the electric competent for us ,It would take 6-7 weeks for them to order new one .if that happens ,Jon and I will use the new CO2 laser to do laser testing .

GPT:

Hi Professor,

Time flies quickly. This week, I primarily focused on testing the mode conversion code. Unfortunately, the experiment is still on hold due to the power supply issue.

Currently, I am drafting the mode conversion report, which includes the algorithm I used in the code and a basic benchmark comparing the results with theoretical predictions. I plan to calculate the CTS polarization in the BEST tokamak and determine the phase shift of the TIRTIP diagnostic under magnetic shear conditions, providing an estimate of the magnetic shear's influence. Following that, I will attempt to combine the energy equation with Maxwell's equations so that we can possibly analyze the heat deposition of electromagnetic waves.

The replacement component for the power supply is still being tested by the company. If they inform us that they don’t have the correct module available, it may take 6-7 weeks for them to order a new one. If that happens, Jon and I plan to use the new CO2 laser for laser testing.

Have a great weekend

Best regards,  
Xinhang