Hi professor

This week I mainly focus on the mode conversion code and FIR laser reflect mirror auto adjustment.

The good news is I have successfully solve the numerical instability in 1d fdtd code ,now its can works on both unmagnetized plasma or magnetized plasma .I have talk with our group this week ,and there are still need more cross-check between numerical results and theory results .After finishing the code benchmark ,The code will try to analysis the mode conversion in the wave transportation on tokamak ,like CTS ,ECE, and reflectometer .I will write a temporary summery about the code in the next week .

The laser mirror auto adjustment program for consistently tracing the optimal position where laser achieve maximum output power is still on the way .I need improve the efficiency of the movement ,cut the unnecessary steps and make the adjustments more timely and flexible.

That is all I done this nowadays . Have a great weekend!

GPT

Hi Professor,

This week, I mainly focused on the mode conversion code and the automatic adjustment of the FIR laser reflect mirror.

The good news is that I have successfully solved the numerical instability in the 1D FDTD code. Now it works for both unmagnetized and magnetized plasmas. I discussed this with our group this week, and we still need more cross-checks between the numerical and theoretical results. After finishing the code benchmark, the code will be used to analyze mode conversion in wave propagation in tokamaks, such as CTS, ECE, and reflectometry. I will write a preliminary summary of the code next week.

The laser mirror auto-adjustment program, which consistently traces the optimal position where the laser achieves maximum output power, is still in progress. I need to improve the efficiency of the movement, eliminate unnecessary steps, and make the adjustments more timely and flexible.

That's all I have done recently. Have a great weekend!

Best regards,

Xinhang