Divertor detachment stability and dynamics

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Abstract

Do I need an abstract? Well, if I do then it will go here, spread over both columns.

1 Introduction

2 Background

Brief overview of the importance of detachment for ITER and future tokamaks. - Current material limit - Divertor geometries (conventional, super-X, snowflake) -

3 Experimental Design

SOL1D was installed on the remote server and some test simulations run to achieve a basic understanding of the set-up and outputs. The first aim was to ascertain an acceptable grid resolution to use, as a compromise is required concerning accuracy of results and time taken to run a simulation. SOL1D performs 1-dimensional simulations and the y-axis was chosen as the simulation axis.

See figure 1 for a nice graph.

Following SOL1D simulations, 2D simulations followed, with the initial goal being to compare results to the 1D case.

4 Results and Analysis

5 Conclusion

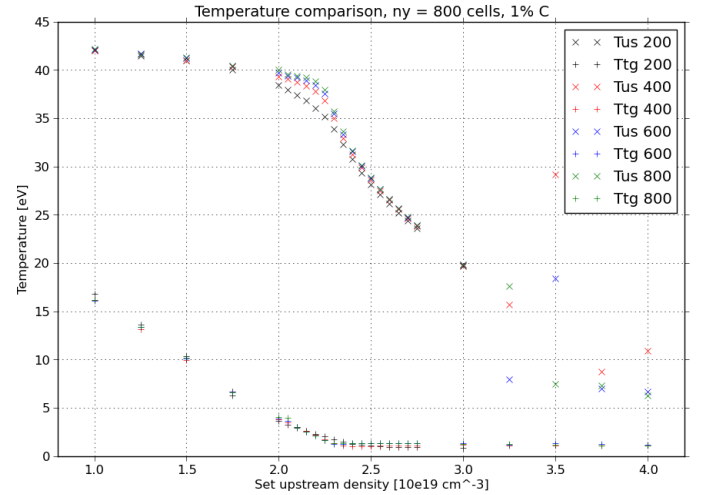## References

[1] Ben Dudson et al. ().

Figure 1: Comparison of $T_{upstream}$ and T_{target} at varying set $n_{e\ upstream}$ for different y-axis resolutions in SOL1D