

# **Recent parallelisation and robustness improvements modelling plasma physics experiments with CORVUS.**

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## **Abstract**

With the arrival of new facilities such as NIF and ORION, there is increased interest in simulating plasma physics experiments. Such simulations may require modelling laser beams, hydrodynamics, 3T radiation transport, NLTE effects, electron conduction etc. In this paper methods to achieve good parallel (MPP) performance despite the local and varying nature of the work load will be presented. Many simulations require mesh scales varying from ~nm to ~mm, techniques to control mesh movement in the ALE context will also be presented.