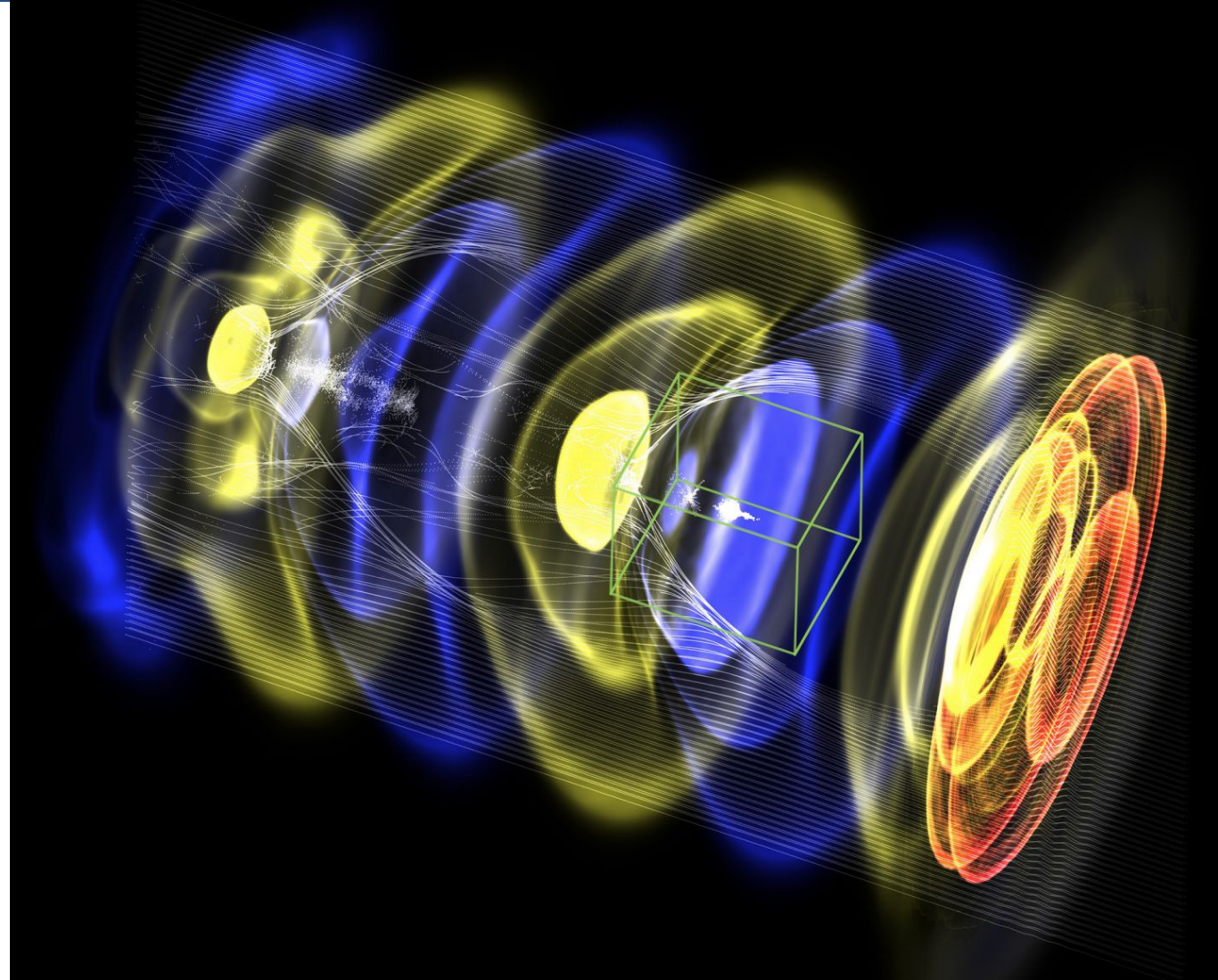


Tested the CUPTI Callback timer in a more realistic use case, the advanced electromagnetic particle-in-cell code WarpX

- WarpX: Advanced Electromagnetic Particle-in-Cell Code
 - Simulates laser wakefield acceleration with mesh refinement
 - Built on AMReX
- With the CUPTI Callback timer now implemented in AMReX, load balancing which properly accounts for GPU work is possible in WarpX



Used CUPTI Callback timing as input to load balancing modules for a WarpX test problem

- Plot to the right is the 2D average along y of particles per cell at $t = 0$
- Dark blue stripe is a region of high particle density
- White region has no particles
- Light red lines show domain decomposition
- Load-imbalanced problem, by construction

