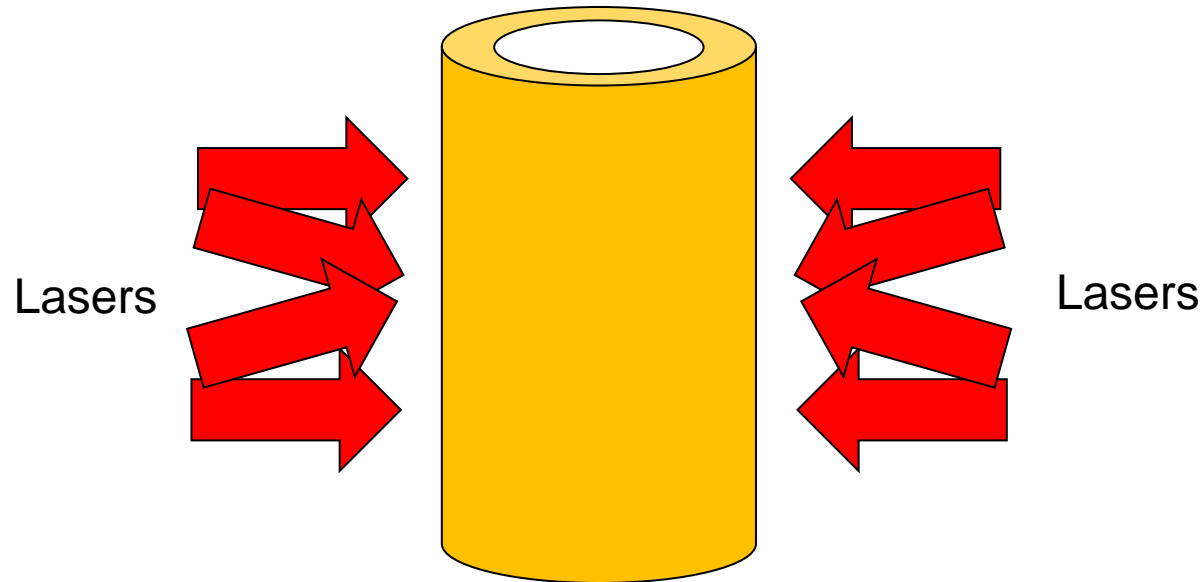# Flash is used to simulate the implosion of a cylindrical target using lasers

Lasers   Lasers

- 2D cylindrical coordinate is used.
- 2D ray tracing is used.
- Cubic interpolation with Runge Kutta Integration (CIRK) is used.
- Ed_targetSemiAxisMajor/Minor=365um. With 8k Rays/beam, there are ~10rays/um. The smallest grid size is 2.44um meaning there are more than 20 beams passing through each grid. The energy deposition should be smooth.
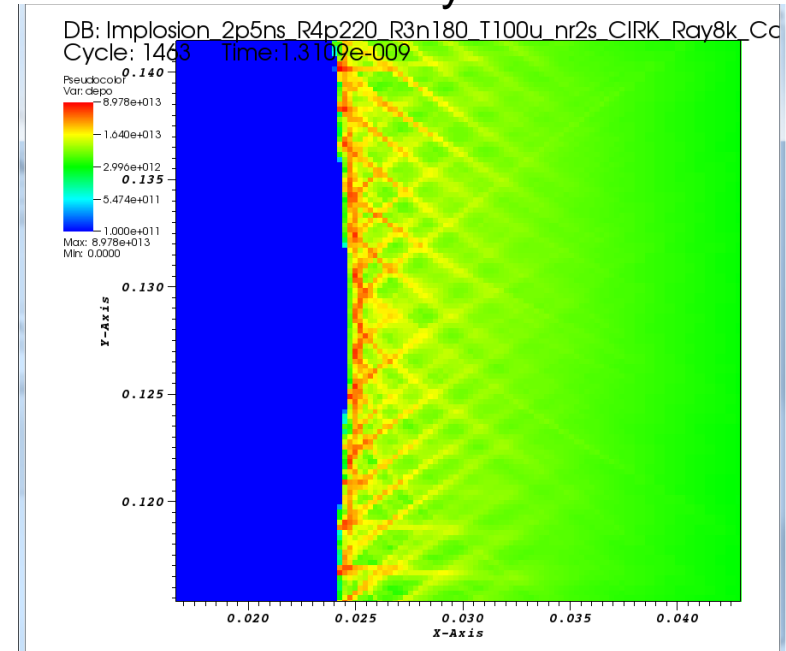
Unexpected energy deposition along ray traces are observed

2000 rays/beam
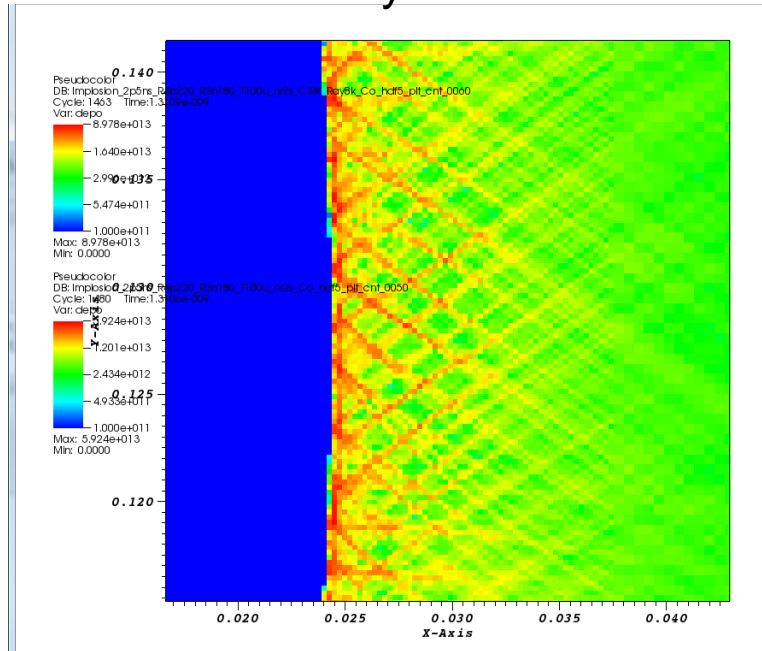
8000 rays/beam

- The energy deposition is not smooth. "Ray traces" are clear in energy deposition plot.
- The number of "ray traces" does not change significantly when the number rays increase by a factor of 4.
- There should be more than 20 rays passing through each gird. However, ray traces with separation bigger than grid size can still be seen.