LLE began to develop a new multidimensional hydrodynamics code **DRACO**, which is now a workhorse at the Laboratory and can run one-, two-, and three-dimensional simulations using an arbitrary Lagrangian–Eulerian hydrodynamics formulation and, where possible, common physics routines.

### Multidimensional Hydrodynamics Code **DRACO**

**DRACO** tests

LLE implemented high-bandwidth frequency tripling on the OMEGA laser.

### High-Bandwidth Frequency Tripling

**Figure demonstrating high-bandwidth frequency tripling**

**LLE** implemented high-bandwidth frequency tripling on the OMEGA laser.

### Multibeam-Phasing Configuration

The first experiments using a “NIF-like multibeam phasing” configuration on hohlraum targets were conducted on **OMEGA**.

### Multibeam-Phasing Configuration

The first experiments using a “NIF-like multibeam phasing” configuration on hohlraum targets were conducted on **OMEGA**.

### Positron Production in Multiphoton Scattering

"Positron Production in Multiphoton Light-by-Light Scattering" was published in Physical Review Letters. The work was the result of a multi-institutional collaboration that made use of an LLE-developed laser source on the Stanford Linear Accelerator Center (SLAC) to provide the first laboratory evidence for inelastic light-by-light scattering involving only real photons.


### Indirect-Drive and Stockpile Stewardship Support

The final focusing parabola for the LLNL Petawatt Laser is prepared for final photometric testing of the optical thin-film coating. The parabola was coated with a high-damage-threshold, high-reflectivity coating by the Optical Manufacturing Group at LLE in a collaboration with LLNL on new laser technologies. The parabola was installed into the LLNL Nova chamber for petawatt experiments in the summer of 1997.

### Indirect-Drive and Stockpile Stewardship Support

**Final focusing parabola for the LLNL Petawatt Laser is prepared for final photometric testing in LLE’s OMAN Shop (Doug Smith)**

"Positron Production in Multiphoton Light-by-Light Scattering" was published in Physical Review Letters. The work was the result of a multi-institutional collaboration that made use of an LLE-developed laser source on the Stanford Linear Accelerator Center (SLAC) to provide the first laboratory evidence for inelastic light-by-light scattering involving only real photons.