

## PUBLICATIONS AND CONFERENCE PRESENTATIONS

### Publications

R. S. Craxton, "Interpretation of Livermore Third-Harmonic-Generation Experiments," *Appl. Opt.* **22**, 2739-2742 (1983).

S. Skupsky, "Uniformity of Energy Deposition for Laser-Driven Fusion," *J. Appl. Phys.* **54**, 3662-3671 (1983).

R. W. Short and E. A. Williams, "Brillouin Scattering of Multiline Laser Light in a Flowing Plasma Corona," *Phys. Fluids* **26**, 2342-2344 (1983).

B. Yaakobi, H. Kim, and J. M. Soures, "Submicron X-Ray Lithography Using Laser-Produced Plasma as a Source," *Appl. Phys. Lett.* **43**, 686-688 (1983).

S. A. Orszag, G. R. Baker, R. L. McCrory, D. I. Meiron, and C. P. Verdon, "Rayleigh-Taylor Instability of Ideal Fluid Layers," *Proceedings of the CEA/Los Alamos Meeting on Hydrodynamic Shock Waves and Instabilities*, Los Alamos, New Mexico, 28 June-1 July 1982, Paper 22 (September 1983).

R. L. McCrory, H. E. Trease, S. A. Orszag, and C. P. Verdon, "Hybrid Pseudospectral Techniques for Coupled Conduction-Hydrodynamic Flows in Multimaterial Media," *Proceedings of the CEA/Los Alamos Meeting on Hydrodynamic Shock Waves and Instabilities*, Los Alamos, New Mexico, 28 June-1 July 1982, Paper 23 (September 1983).

## Forthcoming Publications

W. Knox and L. Forsley, "Data Acquisition System for a Jitter-Free Signal-Averaging Streak Camera," accepted for publication by the American Chemical Society.

B. Yaakobi, J. Delettrez, R. L. McCrory, R. Marjoribanks, M. C. Richardson, D. Shvarts, S. Skupsky, J. M. Soures, C. Verdon, D. M. Villeneuve, T. Boehly, R. Hutchison, and S. Letzring, "Thermal Transport Measurements in 1.05- $\mu\text{m}$  Laser Irradiation of Spherical Targets," accepted for publication by *Physics of Fluids*.

J. A. Abate and R. Roides, "Spatially Resolved Absorption and Detection of Microscopic Impurities in Optical Thin Films by Photothermal Deflection," accepted for publication by *Journal de Physique Colloques (Photoacoustique)*.

J. Lubezky and A. Lubezky, "Antireflective Coatings Design Revisited," accepted for publication by *Optical Engineering*.

A. Simon, R. W. Short, E. A. Williams, and T. Dewandre, "On the Inhomogeneous Two Plasmon Instability," accepted for publication in *Physics of Fluids*.

S. Skupsky, R. L. McCrory, R. S. Craxton, J. Delettrez, R. Epstein, K. Lee, and C. Verdon, "Uniformity of Energy Deposition for Laser-Driven Fusion," *Laser Interaction and Related Plasma Phenomena*, edited by H. Hora and G. Miley (Plenum Press, New York, 1983, in press).

## Conference Presentations

G. Mourou, "High-Speed Electrical Measurements" and "Ultrafast Electrical Transient Analysis with Picosecond Resolutions," presented at the NATO Advanced Study Lecture, Institute Castelveccchio Pascoli (Lucca), Italy, July 1983 (invited talk).

G. Mourou, "Electrical Pulse Shaping Using Frozen Wave Generator and Dispersive Transmission Lines," presented at Lawrence Livermore National Laboratory, Livermore, California, August 1983.

G. Mourou and J. Valdmanis, "Subpicosecond Electrical Sampling," presented at the SPIE Conference on Picosecond Optoelectronics, San Diego, California, August 1983.

R. L. McCrory, "Laser-Fusion Experiments and Theory at the Laboratory for Laser Energetics," presented at the Sixteenth ECLIM Conference, London, England, September 1983 (invited talk).

J. M. Soures, J. M. Forsyth, R. Frankel, M. C. Richardson, and B. Yaakobi, "Applications of Laser-Produced Plasmas," presented at the Sixteenth ECLIM Conference, London, England, September 1983.

J. P. Matte, T. W. Johnston, J. Delettrez, R. L. McCrory, and J. Virmont, "Electron Heat Flow with Inverse Bremsstrahlung and Ion Motion," presented at the Sixteenth ECLIM Conference, London, England, September 1983.

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