
Publications and Conference Presentations

Publications

- E. L. Alfonso, F.-Y. Tsai, S.-H. Chen, R. Q. Gram, and D. R. Harding, "Fabrication of Polyimide Shells by Vapor Phase Deposition for Use as ICF Targets," *Fusion Technol.* **35**, 131 (1999).
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J. M. Wallace, T. J. Murphy, N. D. Delamater, K. A. Klare, J. A. Oertel, G. R. Magelssen, E. L. Lindman, A. A. Hauer, P. Gobby, J. D. Schnittman, R. S. Craxton, W. Seka, R. Kremens, D. K. Bradley, S. M. Pollaine, R. E. Turner, O. L. Landen, D. Drake, and J. J. MacFarlane, “Inertial Confinement Fusion with Tetrahedral Hohlräume at OMEGA,” *Phys. Rev. Lett.* **82**, 3807 (1999).

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Conference Presentations

J. L. Chaloupka and D. D. Meyerhofer, “A Single-Beam, High-Field Trap for Energetic Electrons,” 1998 OSA Annual Meeting/ILS–XIV, Baltimore, MD, 4–9 October 1998.

J. M. Soures, R. L. McCrory, P. B. Radha, R. Betti, W. Bittle, T. R. Boehly, R. Boni, D. K. Bradley, T. J. B. Collins, R. S. Craxton, J. A. Delettrez, W. R. Donaldson, R. Epstein, V. Yu. Glebov, V. N. Goncharov, D. R. Harding, P. A. Jaanimagi, R. L. Keck, J. H. Kelly, T. J. Kessler, J. P. Knauer, C. K. Li, S. J. Loucks, F. J. Marshall, P. W. McKenty, D. D. Meyerhofer, S. F. B. Morse, S. Padalino, R. Petrasso, S. Regan, W. Seka, R. W. Short, A. Simon, S. Skupsky, D. J. Smith, R. P. J. Town, B. Yaakobi, and J. D. Zuegel, “Recent Advances in Direct-Drive ICF Target Physics at the Laboratory for Laser Energetics,” 1998 IAEA Conference, Yokohama, Japan, 19–24 October 1998.

The following presentations were made at the 40th Annual Meeting APS Division of Plasma Physics, New Orleans, LA, 16–20 November 1998:

P. Amendt, R. E. Turner, O. Landen, S. G. Glendinning, D. Kalantar, M. Cable, J. Colvin, C. Decker, L. Suter, R. Wallace, D. K. Bradley, S. F. B. Morse, G. Pien, W. Seka,

and J. M. Soures, “High-Convergence, Indirect-Drive Implosions on OMEGA: Design and Simulations.”

C. A. Back, J. D. Bauer, R. E. Turner, B. F. Lasinski, L. J. Suter, O. L. Landen, W. W. Hsing, and J. M. Soures, “Temporally and Radially Resolved Breakout of Heat Wave in Radiatively Heated Foam Targets.”

C. W. Barnes, D. L. Tubbs, J. B. Beck, J. A. Oertel, N. Shambo, S. A. Voss, R. G. Watt, T. R. Boehly, D. K. Bradley, and J. P. Knauer, “Direct-Drive Cylindrical Implosions on the OMEGA Laser.”

G. R. Bennett, J. M. Wallace, T. J. Murphy, A. A. Hauer, J. A. Oertel, D. C. Wilson, P. L. Gobby, N. D. Delamater, R. E. Chrien, R. S. Craxton, and J. D. Schnittman, “High-Convergence Implosions Within Tetrahedral Hohlräume.”

R. Betti and E. Fedutenko, “Stable Regimes for External Modes in High- β Tokamak Plasmas.”

T. R. Boehly, V. A. Smalyuk, O. Gotchev, J. P. Knauer, D. D. Meyerhofer, D. K. Bradley, J. A. Delettrez, S. Skupsky, and R. P. J. Town, “The Effect of Pulse Shape and Beam Smoothing on Laser Imprinting.”

- D. K. Bradley, J. A. Delettrez, S. P. Regan, S. Skupsky, and D. D. Meyerhofer, "Spherical Rayleigh–Taylor Experiments on the 60-Beam OMEGA Laser System Using the Burn-through Technique."
- T. J. B. Collins, J. P. Knauer, S. Skupsky, and C. P. Verdon, "Control of Ablation Velocity Through Prepulses in Direct-Drive ICF."
- R. S. Craxton, S. Skupsky, A. Babushkin, J. H. Kelly, T. J. Kessler, J. M. Soures, and J. D. Zuegel, "Enhanced Beam Smoothing on OMEGA and the NIF."
- J. A. Delettrez, V. N. Goncharov, S. Skupsky, T. R. Boehly, D. K. Bradley, J. P. Knauer, D. D. Meyerhofer, S. P. Regan, and V. A. Smalyuk, "The Effect of Pulse Shape on Laser Imprint and SSD Smoothing."
- J. Dirrenberger, V. Lobatchev, and R. L. McCrory, "Seeds and Early Development of the Rayleigh–Taylor Instability in Laser-Accelerated Targets."
- R. Elton, E. Iglesias, H. Griem, G. Pien, D. K. Bradley, J. A. Delettrez, and R. Epstein, "Early-Time Extreme-UV Emission from OMEGA Plasmas."
- R. Epstein, T. J. B. Collins, J. A. Delettrez, S. Skupsky, and R. P. J. Town, "Simulation of the Radiative Preheat of Target Foils and Shells in Laser-Driven Ablation and Implosion Experiments."
- Y. Fisher, T. R. Boehly, D. K. Bradley, D. R. Harding, D. D. Meyerhofer, and M. D. Wittman, "Shinethrough Properties of Various Barrier-Layer Materials."
- C. G. R. Geddes, J. Sanchez, G. Collins, and P. W. McKenty, "Interferometric Characterization of Hydrogen Ice Layers in NIF-Scale Targets."
- R. E. Giacone, C. J. McKinstrie, and E. A. Startsev, "Accurate Formulas for the Landau Damping Rates of Electrostatic Waves."
- V. Yu. Glebov, J. P. Knauer, F. J. Marshall, P. W. McKenty, D. D. Meyerhofer, N. S. Rogers, C. Stoeckl, M. D. Cable, and R. E. Turner, "Recent ρR Measurements on OMEGA Using the MEDUSA Scintillator Array."
- V. N. Goncharov, R. Betti, R. L. McCrory, and C. Cherfils, "Linear Stability Analysis of Ablation Fronts During the Shock Transit Time."
- D. Haynes, C. Hooper, N. Delamater, C. Barnes, J. Oertel, G. Pollak, D. Tubbs, R. Watt, T. R. Boehly, D. K. Bradley, P. A. Jaanimagi, and J. P. Knauer, "X-Ray Spectroscopy of Directly Driven Cylindrical Implosions."
- D. G. Hicks, C. K. Li, F. H. Séguin, R. D. Petrasso, J. M. Soures, D. R. Harding, D. D. Meyerhofer, W. Seka, A. Simon, R. W. Short, T. W. Phillips, T. C. Sangster, M. D. Cable, T. P. Bernat, and J. D. Schnittman, "Measurement of Accelerated Ions from OMEGA Targets."
- G. C. Junkel, M. A. Gunderson, D. A. Haynes, Jr., C. F. Hooper, Jr., D. K. Bradley, J. A. Delettrez, P. A. Jaanimagi, and S. P. Regan, "Multi-electron Line Broadening in Hot, Dense Plasmas Including Detailed Line Shift Calculations."
- A. V. Kanaev and C. J. McKinstrie, "Exact Green Function for a Class of Parametric Instabilities."
- R. L. Keck, W. R. Donaldson, W. Seka, and R. Boni, "Beam Power Matching on the OMEGA Laser."
- J. P. Knauer, R. Betti, T. R. Boehly, D. K. Bradley, T. J. B. Collins, J. A. Delettrez, P. W. McKenty, D. D. Meyerhofer, V. A. Smalyuk, and R. P. J. Town, "Growth of Rayleigh–Taylor Unstable, CH Ablation Interfaces Doped with Silicon."
- C. K. Li, D. G. Hicks, F. H. Séguin, R. D. Petrasso, J. M. Soures, D. R. Harding, J. P. Knauer, J. Law, P. B. Radha, S. Skupsky, S. Padalino, T. W. Phillips, T. C. Sangster, and M. D. Cable, "Measurements of Temperature and Areal Density Using Charged-Particle Spectroscopy on OMEGA."
- V. Lobatchev and R. Betti, "Linear Feed-out of Rear Surface Nonuniformities in Planar Geometry."
- F. J. Marshall, B. Yaakobi, D. D. Meyerhofer, R. P. J. Town, J. A. Delettrez, V. Yu. Glebov, D. K. Bradley, J. P. Knauer, M. D. Cable, and T. J. Ognibene, "Surrogate Cryogenic Target Experiments on OMEGA."
- P. W. McKenty, V. Yu. Glebov, D. D. Meyerhofer, N. S. Rogers, C. Stoeckl, J. D. Zuegel, M. D. Cable, T. J. Ognibene, R. A. Lerche, and R. L. Griffith, "Neutron Burn Truncation Experiments on OMEGA."

- C. J. McKinstrie and E. A. Startsev, "Analysis of the Forward and Backward Stimulated Brillouin Scattering of Crossed Laser Beams."
- D. D. Meyerhofer, D. K. Bradley, J. A. Delettrez, V. Yu. Glebov, J. P. Knauer, F. J. Marshall, P. W. McKenty, S. P. Regan, S. Skupsky, C. Stoeckl, and R. P. J. Town, "Hydrodynamic Performance of Spherical CH Targets on OMEGA Using Shaped Laser Pulses."
- T. J. Murphy, J. M. Wallace, K. A. Klare, N. D. Delamater, G. R. Bennett, A. A. Hauer, J. A. Oertel, S. M. Pollaine, R. S. Craxton, and J. D. Schnittman, "Analysis of Imploded Capsule Images from Spherical Hohlräume with Tetrahedral Illumination."
- R. D. Petrasso, C. K. Li, D. G. Hicks, F. H. Séguin, J. M. Soures, V. Yu. Glebov, D. R. Harding, J. P. Knauer, J. Law, D. D. Meyerhofer, P. B. Radha, J. D. Schnittman, W. Seka, R. W. Short, A. Simon, S. Skupsky, C. Stoeckl, T. W. Phillips, T. C. Sangster, T. Ognibene, M. D. Cable, and S. Padalino, "Charged-Particle Spectroscopy on OMEGA: Initial Results" (invited).
- P. B. Radha, S. Skupsky, J. M. Soures, and R. D. Petrasso, "A Novel Diagnostic for ρR in ICF Targets."
- S. P. Regan, T. R. Boehly, D. K. Bradley, T. J. B. Collins, J. A. Delettrez, J. P. Knauer, D. D. Meyerhofer, P. W. McKenty, and V. A. Smalyuk, "A Comparison of Planar Burnthrough Experiments with Single-Mode Rayleigh-Taylor Instability Growth Rate on OMEGA."
- S. P. Regan, D. K. Bradley, J. J. Carroll III, A. V. Chirikikh, R. S. Craxton, R. P. Drake, D. D. Meyerhofer, W. Seka, R. W. Short, A. Simon, R. P. J. Town, and B. Yaakobi, "Laser-Plasma Interactions in NIF Direct-Drive-Scale Plasmas" (invited).
- J. D. Schnittman, R. S. Craxton, S. M. Pollaine, R. E. Turner, J. M. Wallace, T. J. Murphy, N. D. Delamater, J. A. Oertel, A. A. Hauer, and K. A. Klare, "Capsule Implosion Symmetry in OMEGA Tetrahedral Hohlräume."
- W. Seka, A. V. Chirikikh, D. D. Meyerhofer, S. P. Regan, D. K. Bradley, B. Yaakobi, R. S. Craxton, R. W. Short, and A. Simon, "Stimulated Brillouin Scattering in Direct-Drive NIF Conditions."
- N. A. Shambo, W. Barnes, J. A. Oertel, R. G. Watt, T. R. Boehly, D. K. Bradley, and J. P. Knauer, "Neutron Emission from Direct-Drive Cylindrical Implosions."
- R. W. Short, C. K. Li, D. G. Hicks, R. D. Petrasso, J. M. Soures, and W. Seka, "Interpretation of Ion-Acceleration Effects Observed in Charged-Particle Spectroscopy on OMEGA."
- A. Simon, "Return Current Electron Beams and Their Generation of Raman Scattering."
- S. Skupsky, "The Effect of Laser Nonuniformity in Direct-Drive Laser-Fusion Experiments" (invited).
- V. A. Smalyuk, T. R. Boehly, D. K. Bradley, J. P. Knauer, D. D. Meyerhofer, D. Oron, Y. Srebro, and D. Shvarts, "Late-Time Evolution of Broad-Bandwidth, Laser-Imposed Nonuniformities in Accelerated Foils."
- J. M. Soures, D. R. Harding, P. B. Radha, S. Skupsky, C. K. Li, D. G. Hicks, R. D. Petrasso, and F. H. Séguin, "Simultaneous Measurement of Areal Density and Temperature in D³He-Filled Imploding Capsules."
- E. A. Startsev and C. J. McKinstrie, "Simulation of the Forward and Backward Stimulated Brillouin Scattering of Crossed Laser Beams."
- C. Stoeckl, P. W. McKenty, V. Yu. Glebov, D. D. Meyerhofer, N. S. Rogers, J. D. Zuegel, M. D. Cable, T. J. Ognibene, and R. A. Lerche, "Neutron Burn History Measurements on OMEGA."
- R. P. J. Town, F. J. Marshall, J. A. Delettrez, R. Epstein, P. W. McKenty, D. D. Meyerhofer, P. B. Radha, S. Skupsky, and C. Stoeckl, "OMEGA Surrogate Capsule Designs and Experiments."
- R. E. Turner, P. A. Amendt, S. G. Glendinning, D. H. Kalantar, O. L. Landen, R. J. Wallace, M. D. Cable, B. A. Hammel, D. Bradley, V. Yu. Glebov, S. Morse, G. Pien, N. Rogers, W. Seka, and J. M. Soures, "X-ray Drive Symmetry and Implosion Performance in OMEGA Cylindrical Hohlräume Driven by NIF-like Multiple Cone Geometry."

J. M. Wallace, G. R. Bennett, T. J. Murphy, J. A. Oertel, P. Gobby, A. A. Hauer, W. S. Varnum, D. C. Wilson, R. S. Craxton, J. D. Schnittman, and S. M. Pollaine, "Design and Analysis of High-Convergence Capsule Implosions in OMEGA Tetrahedral Hohlraums."

B. Yaakobi, F. J. Marshall, and D. K. Bradley, " $K\alpha$ Cold Target Imaging and Preheat Measurement Using a Pinhole-Array X-Ray Spectrometer."

V. N. Goncharov, "Theory of the Ablative Richtmyer-Meshkov Instability," Conference on Hydrodynamic and Magnetohydrodynamic Interface Instabilities: Unsteady or Discontinuous Flows, Paris, France, 11-12 January 1999.

W. R. Donaldson, R. Boni, R. L. Keck, and P. A. Jaanimagi, "UV-Power Balance on the OMEGA Laser," LASE '99, San Jose, CA, 22-29 January 1999.

A. V. Okishev, M. D. Skeldon, and W. Seka, "A Highly Stable, Diode-Pumped Master Oscillator for the OMEGA Laser Facility," 1999 Advanced Solid-State Lasers Fourteenth Topical Meeting, Boston, MA, 31 January-3 February 1999.

The following presentations were made at the Banff Workshop on Laser Plasma Interaction Physics, Banff, Canada, 17-20 February 1999:

W. Seka, S. P. Regan, D. D. Meyerhofer, B. Yaakobi, R. S. Craxton, A. Simon, and R. W. Short, "Recent SBS and SRS Results Under Direct-Drive NIF Conditions."

R. W. Short, "Effects of SSD on Forward SBS and Filamentation."

A. V. Okishev, M. D. Skeldon, R. L. Keck, R. G. Roides, K. Green, and W. Seka, "A High-Bandwidth Optical Pulse-Shaping/Fiber-Optic Distribution System for the High-Energy OMEGA Laser Fusion Facility," OFC/IOOC '99, San Diego, CA, 21-26 February 1999.

S. Il'in, G. N. Gol'tsman, B. M. Voronov, and R. Sobolewski, "Characterization of the Electron Energy Relaxation Process

in NbN Hot-Electron Devices," 10th International Symposium on Space Terahertz Technology, Charlottesville, VA, 16-18 March 1999.

J. M. Larkin, W. R. Donaldson, T. H. Foster, and R. S. Knox, "Reverse Intersystem Crossing From a Triplet State of Rose Bengal Populated by Sequential 532- and 1064-nm Laser Excitation," APS 1999 Centennial Meeting, Atlanta, GA, 20-26 March 1999.

The following presentations were made at the Spring Meeting of the Materials Research Society, San Francisco, CA, 5-9 April 1999:

I. A. Kozhinova, S. R. Arrasmith, L. L. Gregg, and S. D. Jacobs, "Origin of Corrosion in Magnetorheological Fluids Used for Optical Finishing."

A. B. Shorey, S. D. Jacobs, W. I. Kordonski, S. R. Gorodkin, and K. M. Kwong, "Design and Testing of a New Magnetorheometer."

S. A. Arrasmith, S. D. Jacobs, A. B. Shorey, D. Golini, W. I. Kordonski, S. Hogan, and P. Dumas, "Studies of Material Removal in Magnetorheological Finishing (MRF) from Polishing Spots," 101st Annual Meeting of the American Ceramics Society, Indianapolis, IN, 25-28 April 1999.

The following presentations were made at CLEO/QELS 1999, Baltimore, MD, 23-28 May 1999:

A. Babushkin, W. A. Bittle, M. D. Skeldon, and W. Seka, "Diode-Pumped Regenerative Amplifier for the OMEGA Laser System."

A. Maksimchuk, J. Queneuille, G. Chériaux, G. Mourou, and R. S. Craxton, "Efficient Second-Harmonic Generation of Sub-100-fs Pulses from High-Power Nd:Glass Laser."

A. V. Okishev, "High-Repetition-Rate, Diode-Pumped, Multipass Pre-amplifier for the OMEGA Master Oscillator."

A. V. Okishev, D. Jacobs-Perkins, S. F. B. Morse, D. Scott, and W. Seka, "Prepulse Contrast Monitor for the OMEGA Drive Line."

M. D. Skeldon, A. V. Okishev, R. L. Keck, and W. Seka, "An Optical Pulse-Shaping System Based on Aperture-Coupled Striplines for OMEGA Pulse-Shaping Applications."

The following presentations were made at the 29th Annual Anomalous Absorption Conference, Pacific Grove, CA, 13–18 June 1999:

R. S. Craxton, D. D. Meyerhofer, S. P. Regan, W. Seka, R. P. J. Town, and B. Yaakobi, "Simulations of OMEGA Long-Scale-Length Plasmas Representative of the Transition Portion of NIF Direct-Drive Pulses."

J. A. Delettrez, S. P. Regan, T. R. Boehly, C. Stoeckl, D. D. Meyerhofer, P. B. Radha, J. Gardner, Y. Aglitskiy, T. Lehecka, S. Obenschain, C. Pawley, and S. Serlin, "Analysis of Planar Burnthrough Experiments on OMEGA and NIKE."

R. Epstein, T. J. B. Collins, J. A. Delettrez, V. N. Goncharov, S. Skupsky, R. P. J. Town, and B. Yaakobi, "Simulation of the Radiative Preheat of Target Foils and Shells in Laser-Driven Ablation and Implosion Experiments."

V. Yu. Glebov, D. D. Meyerhofer, P. B. Radha, W. Seka, S. Skupsky, J. M. Soures, C. Stoeckl, T. C. Sangster, S. Padalino, J. Nyquist, and R. D. Petrasso, "Tertiary Neutron Diagnostic by Carbon Activation."

V. N. Goncharov, "Modeling of Laser Imprint for OMEGA and NIF Capsules."

A. V. Kanaev and C. J. McKinstrie, "Numerical Two-Dimensional Studies of Near-Forward Stimulated Brillouin Scattering of a Laser Beam in Plasmas."

M. V. Kozlov and C. J. McKinstrie, "Analysis and Simulation of Sound Waves Governed by the Ion Fluid and Poisson Equations."

V. Lobatchev and R. Betti, "Numerical Study of Linear Feed-out of Short-Wavelength, Rear-Surface Perturbations in Planar Geometry."

C. J. McKinstrie and M. V. Kozlov, "Analysis and Simulation of Sound Waves Governed by the Korteweg–de Vries Equation."

D. D. Meyerhofer, R. Bahr, R. S. Craxton, S. P. Regan, W. Seka, R. P. J. Town, and B. Yaakobi, "Laser–Plasma Interactions in Plasmas Characteristic of the Direct-Drive NIF Foot-to-Main Drive Region."

S. P. Regan, J. A. Delettrez, T. R. Boehly, D. K. Bradley, J. P. Knauer, D. D. Meyerhofer, and C. Stoeckl, "Planar Burn-through Experiments on OMEGA and NIKE."

R. W. Short, "Forward SBS, Filamentation, and SSD."

V. A. Smalyuk, F. J. Marshall, D. D. Meyerhofer, and B. Yaakobi, "Imaging of Compressed Shells with Embedded Thin, Cold, Titanium-Doped Layers on OMEGA."

Y. Srebro, D. Oron, D. Shvarts, T. R. Boehly, V. N. Goncharov, O. Gotchev, V. N. Smalyuk, S. Skupsky, and D. D. Meyerhofer, "Hydrodynamic Simulations of Static and Dynamic Laser Imprint."

E. A. Startsev and C. J. McKinstrie, "Particle-in-Cell Simulation of Ponderomotive Particle Acceleration in a Plasma."

C. Stoeckl, V. Yu. Glebov, D. D. Meyerhofer, W. Seka, V. A. Smalyuk, and J. D. Zuegel, "Hard X-Ray Signatures for Laser–Plasma Instabilities on OMEGA."

The following presentations were made at ISEC '99, Berkeley, CA, 21–25 June 1999:

R. Adam, C. Williams, R. Sobolewski, O. Harnack, and M. Darula, "Experiments and Simulations of Picosecond Pulse Switching and Turn-on Delay Time in Y-Ba-Cu-O Josephson Junctions."

K. S. Il'in, A. A. Verevkin, G. N. Gol'tsman, and R. Sobolewski, "Infrared Hot-Electron NbN Superconducting Photodetectors for Imaging Applications."

J. L. Chaloupka and D. D. Meyerhofer, "Observation of Electron Trapping in an Intense Laser Beam," Applications of High-Field and Short-Wavelength Sources VIII Topical Meeting, Potsdam, Germany, 27–30 June 1999.

The following presentations were made by R. P. J. Town at the 1999 Fusion Summer Study Workshop, Snowmass, CO, 11–23 July 1999: “The OMEGA Laser System,” “Rayleigh–Taylor Experiments on the OMEGA Laser,” and “Direct-Drive Issues on the NIF.”

The following presentations were made at SPIE’s International Symposium on Optical Science, Engineering, and Instrumentation, Denver, CO, 18–23 July 1999:

S. R. Arrasmith, I. A. Kozhinova, L. L. Gregg, H. J. Romanofsky, A. B. Shorey, S. D. Jacobs, D. Golini, W. I. Kordonski, P. Dumas, and S. Hogan, “Details of the Polish-ing Spot in Magnetorheological Finishing.”

D. D. Meyerhofer, T. Ditmire, N. Hay, M. H. R. Hutchinson, M. B. Mason, and J. W. G. Tisch, “Measurements of the Spatiotemporal Properties of High-Order Harmonics.”

A. B. Shorey, L. L. Gregg, H. J. Romanofsky, S. R. Arrasmith, I. A. Kozhinova, and S. D. Jacobs, “A Study of Material Removal During Magnetorheological Finishing.”

The following presentations were made at Inertial Fusion Sciences and Applications (IFSA) 1999, Bordeaux, France, 12–17 September 1999:

V. N. Goncharov, S. Skupsky, P. W. McKenty, J. A. Delettrez, R. P. J. Town, and C. Cherfiles-Clérouin, “Stability Analysis of Directly Driven OMEGA and NIF Capsules.”

D. R. Harding, R. Q. Gram, M. D. Wittman, L. D. Lund, D. Lonobile, M. J. Shoup III, S. J. Loucks, G. Besenbruch, K. Schultz, A. Nobile, and S. Letzring, “Direct-Drive Cryogenic Targets and the OMEGA Cryogenic Target Handling System.”

R. L. McCrory, R. E. Bahr, T. R. Boehly, T. J. B. Collins, R. S. Craxton, J. A. Delettrez, W. R. Donaldson, R. Epstein, V. N. Goncharov, R. Q. Gram, D. R. Harding, P. A. Jaanimagi, R. L. Keck, J. P. Knauer, S. J. Loucks, F. J. Marshall, P. W. McKenty, D. D. Meyerhofer, S. F. B. Morse, P. B. Radha, S. P. Regan, W. Seka, S. Skupsky, V. A. Smalyuk, J. M. Soures, C. Stoeckl, R. P. J. Town, M. D. Wittman, B. Yaakobi, J. D. Zuegel, R. D. Petrasso, D. G. Hicks, C. K. Li, and O. V. Gotchev, “OMEGA Experiments and Preparation for Direct-Drive Ignition on the National Ignition Facility.”

D. D. Meyerhofer, T. R. Boehly, D. K. Bradley, T. J. B. Collins, J. A. Delettrez, Y. Fisher, V. N. Goncharov, O. Gotchev, J. P. Knauer, P. W. McKenty, S. P. Regan, W. Seka, S. Skupsky, V. A. Smalyuk, R. P. J. Town, and B. Yaakobi, “Direct-Drive Imprinting and Rayleigh–Taylor Experiments on OMEGA.”

W. Seka, D. D. Meyerhofer, S. P. Regan, R. S. Craxton, B. Yaakobi, C. Stoeckl, A. Simon, R. W. Short, and R. E. Bahr, “NIF-Scale Direct-Drive Interaction on OMEGA.”

S. Skupsky, T. J. B. Collins, R. S. Craxton, J. A. Delettrez, R. Epstein, V. N. Goncharov, P. W. McKenty, P. B. Radha, R. P. J. Town, D. D. Meyerhofer, W. Seka, and R. L. McCrory, “Simulation of OMEGA Experiments as a Prelude to Direct-Drive NIF Ignition Experiments.”

B. Yaakobi, F. J. Marshall, V. Yu. Glebov, R. D. Petrasso, J. M. Soures, V. A. Smalyuk, D. D. Meyerhofer, W. Seka, J. A. Delettrez, and R. P. J. Town, “Spherical Implosion Experiments on OMEGA: Measurements of the Cold, Compressed Shell.”

J. D. Zuegel, D. Jacobs-Perkins, J. Marozas, R. G. Roides, R. S. Craxton, J. H. Kelly, S. Skupsky, W. Seka, and S. Letzring, “Broadband Beam Smoothing on OMEGA with Two-Dimensional Smoothing by Spectral Dispersion.”

S. R. Arrasmith, S. D. Jacobs, I. A. Kozhinova, A. B. Shorey, D. Golini, W. I. Kordonski, S. Hogan, and P. Dumas, “Development and Characterization of Magnetorheological Fluids for Optical Finishing,” *Fine Powder Processing '99*, University Park, PA, 20–22 September 1999.

The following presentations were made at the Optical Society of America’s Annual Meeting, Santa Clara, CA, 26 September–1 October 1999:

D. Golini and S. D. Jacobs, “Magnetorheological Finishing of Aspheres.”

S. D. Jacobs, S. A. Arrasmith, I. A. Kozhinova, L. L. Gregg, H. J. Romanofsky, A. B. Shorey, D. Golini, W. I. Kordonski, P. Dumas, and S. Hogan, “Magnetorheological Finishing of KDP.”