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D. C. Wilson, G. A. Kyrala, J. F. Benage Jr., F. J. Wysocki, M. A. Gunderson, W. J. Garbett, V. Yu. Glebov, J. Frenje, B. Yaakobi, H. W. Herrman, J. H. Cooley, L. Welser-Sherrill, C. J. Horsfield, and S. A. Roberts, "The Effects of Pre-Mix on Burn in ICF Capsules," J. Phys., Conf. Ser. **112**, 022015 (2008).

Conference Presentations

T. C. Sangster, R. Betti, K. S. Anderson, J. A. Delettrez, V. Yu. Glebov, V. N. Goncharov, F. J. Marshall, D. N. Maywar, R. L. McCrory, D. D. Meyerhofer, P. B. Radha, D. Shvarts, V. A. Smalyuk, R. B. Stephens, C. Stoeckl, B. Yaakobi, C. D. Zhou, J. A. Frenje, C. K. Li, F. H. Séguin, and R. D. Petrasso, "Fast-Ignition Research at the Laboratory for Laser Energetics," 1st International Conference on Ultra-Intense Laser Interaction Sciences, Bordeaux, France, 1–5 October 2007.

The following presentations were made at the 6th International Laser Operations Workshop, Bordeaux, France, 9–11 October 2007:

J. L. Edwards, "Accessing Information and Maintaining Configuration Control of the OMEGA EP Laser System."

R. Janezic, L. M. Elasky, D. R. Harding, and S. J. Loucks, "Cryogenic DT Target Operations in the LLE OMEGA Facility."

B. E. Kruschwitz, L. J. Waxer, and J. H. Kelly, "OMEGA EP Activation Status."

S. J. Loucks, "LLE Overviews."

S. F. B. Morse, "Availability and Effectiveness Planning on OMEGA EP."

G. Pien, "Multi-Facility Diagnostic Development."

A. L. Rigatti, "Operational Issues Related to OMEGA and OMEGA EP Optics."

B. Ashe, K. L. Marshall, D. Mastrosimone, and C. McAtee, "Minimizing Contamination to Multilayer Dielectric Diffraction Gratings Within a Large Vacuum System," 54th AVS International Symposium, Seattle, WA, 14–19 October 2007.

J. R. Marciante, W. R. Donaldson, and R. G. Roides, "Enhanced-Dynamic-Range, Single-Shot Measurement of Nanosecond Pulses via Optical Replication," IEEE/LEOS, Lake Buena Vista, FL, 21–25 October 2007.

T. J. Kessler, "Laser Development at the Laboratory for Laser Energetics," 10th Annual Directed Energy Symposium, Huntsville, AL, 5–8 November 2007.

The following presentations were made at the 49th Annual Meeting of the APS Division of Plasma Physics, Orlando, FL, 12–16 November 2007:

K. S. Anderson, R. Betti, I. V. Igumenshchev, P. W. McKenty, P. B. Radha, W. Theobald, C. Stoeckl, and M. M. Marinak, "Direct-Drive Fuel-Assembly Simulations of Fast-Ignition Cone-in-Shell Implosions."

R. Betti and C. D. Zhou, "Measurable Lawson Criterium and Hydro-Equivalent Curves for Inertial Confinement Fusion."

T. R. Boehly, M. A. Barrios, D. E. Fratanduono, T. C. Sangster, D. D. Meyerhofer, P. M. Celliers, D. Munro, G. W. Collins, O. L. Landen, and R. E. Olson, "Development of Shock-Timing Techniques for the National Ignition Facility."

M. Braaten, C. Brown, S. Padalino, V. Glebov, T. C. Sangster, and T. Duffy, "Measuring Positron Annihilation in Na(Tl) Detectors as the Final Stage in a Carbon Diagnostic."

D. T. Casey, J. A. Frenje, S. C. McDuffee, C. K. Li, J. R. Rygg, F. H. Séguin, R. D. Petrasso, V. Yu. Glebov, D. D. Meyerhofer, S. Roberts, and T. C. Sangster, "The CR-39 Coincidence Counting Technique for Enhanced Signal-to-Background in a Large Range of Charged-Particle Measurements on OMEGA and the NIF."

T. J. B. Collins, J. A. Marozas, P. W. McKenty, P. B. Radha, S. Skupsky, and J. D. Zuegel, "Single-Beam Smoothing

Requirements for Wetted-Foam, Direct-Drive NIF Ignition Target Designs."

J. H. Cooley, L. Welser-Sherrill, D. C. Wilson, H. W. Herrmann, J. M. Mack, S. C. Evans, T. J. Sedillo, C. J. Horsfield, D. W. Drew, E. K. Miller, and V. Yu. Glebov, "Evaluation and Modeling of Neutron Reaction Histories Using a Directly Driven Capsule with Two Laser Pulses."

R. S. Craxton, A. M. Cok, and P. W. McKenty, "Initial Polar-Direct-Drive Designs to Optimize Neutron Yields on the NIF."

M. Cummings, K. Donovan, S. Padalino, V. Glebov, and T. C. Sangster, "Elemental Analysis of Carbon Disks Using Proton Induced X-Ray Emission."

J. A. Delettrez, D. Shvarts, P. B. Radha, C. Stoeckl, V. A. Smalyuk, A. V. Maximov, T. C. Sangster, R. D. Petrasso, and J. A. Frenje, "Transport of Energetic Electrons Produced from Two-Plasmon Decay in the 1-D Hydrodynamic Code *LILAC*."

D. H. Edgell, W. Seka, J. A. Delettrez, R. S. Craxton, V. N. Goncharov, I. V. Igumenshchev, J. Myatt, A. V. Maximov, R. W. Short, T. C. Sangster, and R. E. Bahr, "Scattered-Laser-Light Spectroscopy in Direct-Drive Implosion Experiments."

R. Epstein, J. A. Delettrez, V. N. Goncharov, J. P. Knauer, P. W. McKenty, F. J. Marshall, D. Li, P. B. Radha, S. P. Regan, H. Sawada, and B. Yaakobi, "Radiative Transport Modeling Relevant to Cryogenic Implosion Simulation and Diagnosis."

S. H. Fay, C. M. Kuhn, E. E. Smith, S. L. Stephenson, T. C. Sangster, V. Glebov, and S. J. Padalino, "Modeling a Carbon Diagnostic System Using MCNPX."

D. E. Fratanduono, M. A. Barrios, T. R. Boehly, D. D. Meyerhofer, D. G. Hicks, P. M. Celliers, S. Wilks, and J. E. Miller, "Nonequilibrium Conditions in a Shock Front."

J. A. Frenje, D. T. Casey, C. K. Li, J. R. Rygg, F. H. Séguin, R. D. Petrasso, V. Yu. Glebov, D. D. Meyerhofer, and T. C. Sangster, "First Measurements of the Neutron Spectrum Using the Magnetic Recoil Spectrometer (MRS) at OMEGA."

M. Ghilea, D. D. Meyerhofer, T. C. Sangster, D. J. Lonobile, A. Dillenbeck, R. A. Lerche, and L. Disdier, "First Tests on OMEGA of a Bubble Chamber for Neutron Detection."

V. Yu. Glebov, T. C. Sangster, C. Stoeckl, S. Roberts, W. Bittle, J. L. Bourgade, J. L. Leray, and R. A. Lerche, "Neutron-Induced Signal Measurements in Coaxial Cables on OMEGA."

V. N. Goncharov, T. C. Sangster, P. B. Radha, T. R. Boehly, T. J. B. Collins, R. S. Craxton, J. A. Delettrez, R. Epstein, V. Yu. Glebov, S. X. Hu, I. V. Igumenshchev, R. Janezic, S. J. Loucks, J. R. Marciante, J. A. Marozas, F. J. Marshall, D. N. Maywar, J. P. Knauer, P. W. McKenty, S. P. Regan, R. G. Roides, W. Seka, S. Skupsky, V. A. Smalyuk, J. M. Soures, C. Stoeckl, R. Betti, R. L. McCrory, D. D. Meyerhofer, D. Shvarts, J. A. Frenje, R. D. Petrasso, and C. K. Li, "Performance of Direct-Drive Cryogenic Targets on OMEGA" (invited).

O. V. Gotchev, P. Y. Chang, N. W. Jang, J. P. Knauer, D. D. Meyerhofer, R. Betti, C. K. Li, J. A. Frenje, F. H. Séguin, and R. D. Petrasso, "Laser-Driven Magnetic-Flux Compression Experiments on the OMEGA Laser."

D. R. Harding, D. H. Edgell, and L. M. Elasky, "Forming Cryogenic DT Targets for OMEGA."

S. X. Hu, V. A. Smalyuk, V. N. Goncharov, P. B. Radha, J. P. Knauer, T. C. Sangster, D. D. Meyerhofer, I. V. Igumenshchev, J. A. Marozas, and S. Skupsky, "Validation of Thermal Transport Modeling in Direct-Drive Targets Using Planar-Foil Experiments on OMEGA."

I. V. Igumenshchev, V. N. Goncharov, F. J. Marshall, M. J. Bonino, P. W. McKenty, D. D. Meyerhofer, and T. C. Sangster, "The Effect of Target Mounts in Direct-Drive Implosions on OMEGA."

J. P. Knauer, P. B. Radha, V. N. Goncharov, I. V. Igumenshchev, R. Betti, R. Epstein, F. J. Marshall, S. P. Regan, V. A. Smalyuk, D. D. Meyerhofer, and S. Skupsky, "Rayleigh–Taylor Growth and Spherical Compression Measurements of Silicon-Doped Ablators."

G. A. Kyrala, A. Seifter, N. M. Hoffman, D. C. Wilson, S. R. Goldman, N. D. Delamater, V. Glebov, C. Stoeckl, F. Marshall, C. K. Li, and J. Frenje, "Using Beam Pushing and Pointing to Control Indirect Drive Implosion Symmetry."

D. Li, V. N. Goncharov, I. V. Igumenshchev, and S. Skupsky, "Modeling Ion Heat Transport in ICF Targets."

G. Li, C. Ren, R. Yan, V. N. Goncharov, T. L. Wang, W. B. Mori, and J. Tonge, "Laser Channeling in Millimeter-Scale Underdense Plasmas of Fast Ignition."

J. Lundgren, B. Esham, S. J. Padalino, T. C. Sangster, and V. Glebov, "VELoCiRaPTORS."

J. Mack, C. Young, S. Evans, H. Herrmann, M. Moran, R. Malone, and V. Glebov, "NIF Conceptual Design Studies of Bang Time Diagnostics Using d-t Fusion Gamma Rays."

J. A. Marozas, T. J. B. Collins, C. Dorrer, and J. D. Zuegel, "Alternative Laser-Speckle-Smoothing Schemes for the NIF."

F. J. Marshall, J. P. Knauer, T. C. Sangster, J. A. Delettrez, P. W. McKenty, R. Epstein, V. N. Goncharov, and B. Yaakobi, "X-Ray Spectral Measurements of Cryogenic Capsules Imploded by OMEGA."

A. V. Maximov, J. Myatt, R. W. Short, W. Seka, and C. Stoeckl, "Two-Plasmon-Decay Instability Driven by Incoherent Laser Irradiation."

R. L. McCrory, D. D. Meyerhofer, R. Betti, R. S. Craxton, J. A. Delettrez, D. H. Edgell, V. Yu. Glebov, V. N. Goncharov, D. R. Harding, D. W. Jacobs-Perkins, J. P. Knauer, F. J. Marshall, P. W. McKenty, P. B. Radha, S. P. Regan, T. C. Sangster, W. Seka, R. W. Short, S. Skupsky, V. A. Smalyuk, J. M. Soures, C. Stoeckl, B. Yaakobi, D. Shvarts, J. A. Frenje, C. K. Li, R. D. Petrasso, and F. H. Séguin, "Progress in Direct-Drive Inertial Confinement Fusion Research" (review talk).

P. W. McKenty, A. Shvydky, T. J. B. Collins, J. A. Marozas, S. Skupsky, D. Keller, D. D. Meyerhofer, and R. L. McCrory, "Multidimensional Numerical Investigation of NIF Saturn PDD Designs with 3-D Laser Ray Tracing."

D. D. Meyerhofer, J. H. Kelly, S. J. Loucks, R. L. McCrory, S. F. B. Morse, and C. Stoeckl, "OMEGA EP: Status and Use Planning."

J. Myatt, A. V. Maximov, R. W. Short, and D. D. Meyerhofer, "Design of a Positron–Electron Pair-Plasma Production Experiment on OMEGA EP."

P. Nilson, W. Theobald, J. Myatt, C. Stoeckl, C. Mileham, M. Storm, O. V. Gotchev, I. A. Begishev, J. Brown, J. D. Zuegel, R. Betti, D. D. Meyerhofer, and T. C. Sangster, "High-Intensity Laser–Plasma Interactions in the Refluxing Limit" (invited).

S. Padalino, "Plasma Physics Research at an Undergraduate Institution."

E. Pogozelski, B. See, C. Kieffer, W. Becker, S. Padalino, and C. Sangster, "Impact of Cryogenic Temperatures on the Mechanical Properties of *Steatoda Triangulosa* Spider Silk."

P. B. Radha, J. P. Knauer, T. C. Sangster, V. N. Goncharov, I. V. Igumenshchev, R. Betti, R. Epstein, D. D. Meyerhofer, S. P. Regan, V. A. Smalyuk, S. Skupsky, J. A. Frenje, C. K. Li, and R. D. Petrasso, "Using Doped Ablators on OMEGA to Achieve a Low-Adiabat Cryogenic Implosion at High Intensities."

S. P. Regan, T. C. Sangster, D. D. Meyerhofer, W. Seka, B. Yaakobi, R. L. McCrory, C. Stoeckl, V. Yu. Glebov, N. B. Meezan, B. Kruer, L. J. Suter, E. A. Williams, O. S. Jones, D. A. Callahan, M. D. Rosen, O. L. Landen, S. H. Glenzer, C. Sorce, and B. J. MacGowan, "Hohlraum Hot-Electron Production."

T. C. Sangster, V. N. Goncharov, V. A. Smalyuk, R. Betti, D. Shvarts, P. B. Radha, J. A. Delettrez, D. H. Edgell, R. Epstein, V. Yu. Glebov, R. L. McCrory, P. W. McKenty, D. D. Meyerhofer, F. J. Marshall, W. Seka, S. Skupsky, C. Stoeckl, B. Yaakobi, J. A. Frenje, C. K. Li, R. D. Petrasso, and F. H. Séguin, "High-Areal-Density Cryogenic D_2 Implosions on OMEGA."

H. Sawada, S. P. Regan, P. B. Radha, R. Epstein, V. N. Goncharov, D. D. Meyerhofer, V. A. Smalyuk, T. C. Sangster, B. Yaakobi, and R. C. Mancini, "Investigation of Shock Heating and Heat-Front Penetration in Direct-Drive Targets Using Absorption Spectroscopy."

W. Seka, D. H. Edgell, J. P. Knauer, J. Myatt, A. V. Maximov, R. W. Short, T. C. Sangster, R. E. Bahr, R. S. Craxton, J. A. Delettrez, V. N. Goncharov, I. V. Igumenshchev, and D. Shvarts, "Time-Resolved Absorption in Cryogenic and Room-Temperature, Direct-Drive Implosions" (invited).

R. W. Short and J. Myatt, "Kinetic and Fluid Models of the Filamentation Instability of Relativistic Electron Beams for Fast-Ignition Conditions."

A. Shvydky, I. V. Igumenshchev, D. Keller, J. A. Marozas, P. W. McKenty, and S. Skupsky, "Irradiation Uniformity in Direct-Drive Simulations Using 3-D Ray Trace."

S. Skupsky, V. N. Goncharov, and D. Li, "Nonlocal Ion-Heat Transport and Viscosity in ICF Implosions Using a Quasi-Monte Carlo Approach."

V. A. Smalyuk, J. A. Delettrez, V. N. Goncharov, S. X. Hu, D. D. Meyerhofer, S. P. Regan, T. C. Sangster, D. Shvarts, C. Stoeckl,

B. Yaakobi, J. A. Frenje, and R. D. Petrasso, "Effects of Preheating on Compression and Rayleigh–Taylor Growth in Planar Plastic Targets on OMEGA."

A. A. Solodov, K. S. Anderson, R. Betti, V. Gotcheva, J. Myatt, J. A. Delettrez, and S. Skupsky, "Integrated Simulation of Fast-Ignition ICF."

C. Stoeckl, W. Theobald, P. A. Jaanimagi, P. Nilson, M. Storm, J. A. Delettrez, R. Epstein, T. C. Sangster, D. Hey, A. J. MacKinnon, H.-S. Park, P. K. Patel, R. Shepherd, J. Green, K. L. Lancaster, and P. A. Norreys, "High-Brightness ~keV Source Development."

M. Storm, D. D. Meyerhofer, C. Mileham, J. Myatt, P. Nilson, T. C. Sangster, C. Stoeckl, and W. Theobald, "High Spatially Resolved Measurements of MeV Electron Beam Transport Through Solids Using Coherent Transition Radiation."

J. Strain, G. Rawcliffe, J. Katz, K. Fletcher, J. Frenje, and S. MacMullin, "Preparation of Deuterated Polymer Targets for the OMEGA Magnetic Recoil Spectrometer."

S. Sublett, J. P. Knauer, D. D. Meyerhofer, and A. Frank, "OMEGA Laser-Driven Hydrodynamic Plasma Jet Experiments with Relevance to Astrophysics."

W. Theobald, R. Betti, C. Stoeckl, K. S. Anderson, J. A. Delettrez, V. Yu. Glebov, V. N. Goncharov, F. J. Marshall, D. N. Maywar, R. L. McCrory, D. D. Meyerhofer, P. B. Radha, T. C. Sangster, D. Shvarts, V. A. Smalyuk, A. A. Solodov, B. Yaakobi, C. D. Zhou, J. A. Frenje, C. K. Li, F. H. Séguin, R. D. Petrasso, and L. J. Perkins, "Initial Experiments of the Shock-Ignition ICF Concept" (invited).

G. T. Young, S. M. Hupcher, C. G. Freeman, M. A. Stoyer, and T. C. Sangster, "Noble Gas Analysis for the OMEGA Gas Sampling System."

C. D. Zhou and R. Betti, "Hydrodynamic Relations for Direct-Drive, Fast-Ignition Inertial Confinement Fusion Implosions."

V. Yu. Glebov, T. C. Sangster, C. Stoeckl, S. Roberts, C. Mileham, O. Landoas, L. Disdier, M. Houry, M. Briat, B. Brullot, Ph. Bergonzo, H. Hamrita, and D. Tromson, "Development of Fast CVD Diamond Detectors for Inertial Confinement Fusion Experiments," Materials Research Society 2007 Fall Meeting, Boston, MA, 26–30 November 2007.

J. M. Soures, "Research Plans for OMEGA EP," FPA Annual Symposium, Oak Ridge, TN, 4–5 December 2007.

A. V. Okishev, V. I. Smirnov, L. B. Glebov, and J. D. Zuegel, "Optical Differentiator Based on a Regenerative Amplifier with an Intracavity Tunable Volume Bragg Grating Filter," Advanced Solid-State Photonics, Nara, Japan, 27–30 January 2008.

T. C. Sangster, "OMEGA EP High-Energy Petawatt Laser: Status and Progress," JOWOG '08, Los Alamos, NM, 4–8 February 2008.

W. T. Shmayda, "Fusion-Power and Hydrogen-Economy Community Material Issues," American Ceramic Society Conference, Cocoa Beach, FL, 24–27 February 2008.

J. M. Soures and D. D. Meyerhofer, "OMEGA and OMEGA EP Provide Unique Capabilities for NLUF Programs," NNSA–SSAA Symposium, Washington, DC, 26–28 February 2008.

A. V. Okishev, "The OMEGA/OMEGA EP Laser System: New Frontiers in ICF and HEDP Research," X Khariton's Topical Scientific Readings, Sarov, Russia, 11–14 March 2008.

The following presentations were made at the NIF Diagnostic Workshop, Los Alamos National Laboratory, Los Alamos, NM, 28 March 2008:

V. Yu. Glebov, T. C. Sangster, C. Stoeckl, M. Cruz, S. Roberts, M. Moran, and R. A. Lerche, "A Neutron Bang Time (NBT) Detector for the THD Campaign on the NIF."

V. Yu. Glebov, T. C. Sangster, C. Stoeckl, T. Duffy, M. Cruz, S. Roberts, M. Moran, and R. A. Lerche, L. Dauffy,

R. Tommasini, A. Throop, J. Celeste, Z. A. Ali, and C. J. Horsfield, "The NIF Neutron Time-of-Flight (nTOF) Diagnostic Status and Plans."

The following presentations were made at HEDP/HEDLA–08, St. Louis, MO, 11–15 April 2008:

D. D. Meyerhofer, "HED Physics Opportunities on OMEGA/OMEGA EP."

S. P. Regan, H. Sawada, D. D. Meyerhofer, P. B. Radha, J. A. Delettrez, R. Epstein, V. N. Goncharov, D. Li, V. A. Smalyuk, T. C. Sangster, B. Yaakobi, and R. C. Mancini, "Creating and Probing Matter Compressed and Heated by Shock Waves on OMEGA."

J. P. Knauer, S. Sublett, R. S. Craxton, T. J. B. Collins, I. V. Igumenshchev, D. D. Meyerhofer, A. Frank, and R. P. Drake, "Hydrodynamic Jet Experiments at LLE," APS April Meeting 2008, St. Louis, MO, 12–15 April 2008.

C. Miao, S. N. Shafrir, S. Adar, H. Romanofsky, and S. D. Jacobs, "*In-Situ* Drag Force and Normal Force Measurement for Magnetorheological Finishing (MRF) of Hard Ceramics," 16th Symposium on Materials Research, Rochester, NY, 22 April 2008.

S. N. Shafrir, S. D. Jacobs, S. Adar, C. Miao, H. Romanofsky, and J. C. Lambropoulos, "Drag Force and Surface Texture in Material Removal with MRF on Optical Glass and Hard Ceramics," 12th Department of Defense Electromagnetic Windows Symposium, Redstone Arsenal, AL, 28 April–1 May 2008.

The following presentations were made at CLEO 2008, San Jose, CA, 6–8 May 2008:

S.-W. Bahk, J. Bromage, J. D. Zuegel, and J. R. Fienup, "Application of Phase Retrieval for Predicting a High-Intensity-Focused Laser Field."

C. Dorrer, "Effect of Jitter on Linear Self-Referencing Pulse-Characterization Techniques."

C. Dorrer, I. A. Begishev, A. V. Okishev, and J. D. Zuegel, "Extreme-Contrast Front End for High-Power Laser Systems."

C. Dorrer, J. Bromage, and J. D. Zuegel, "High-Dynamic-Range, Single-Shot Cross-Correlator Using a Pulse Replicator."

C. Dorrer, A. V. Okishev, I. A. Begishev, J. D. Zuegel, V. I. Smirnov, and L. B. Glebov, "Optical Parametric Chirped-Pulse–Amplification Contrast Enhancement by Regenerative Pump Spectral Filtering."

W. Guan and J. R. Marciante, "Suppression of Self-Pulsations in Dual-Clad Ytterbium-Doped Fiber Lasers."

A. V. Okishev, "Multimillijoule Picosecond Regenerative Differentiator-Amplifier."

J. Qiao, A. Kalb, J. H. Kelly, D. Canning, T. Nguyen, and J. Bunkenburg, "Realization of Tiled-Grating Compressors for the OMEGA EP Petawatt Laser System."

L. J. Waxer, M. J. Guardalben, J. H. Kelly, B. E. Kruschwitz, J. Qiao, I. A. Begishev, J. Bromage, C. Dorrer, J. L. Edwards, L. Folnsbee, S. D. Jacobs, R. Jungquist, T. J. Kessler, R. W. Kidder, S. J. Loucks, J. R. Marciante, D. N. Maywar, R. L. McCrory, D. D. Meyerhofer, S. F. B. Morse, A. V. Okishev, J. B. Oliver, G. Pien, J. Puth, and A. L. Rigatti, "The OMEGA EP High-Energy, Short-Pulse Laser System" (invited).

The following presentations were made at the 17th Topical Conference on High-Temperature Plasma Diagnostics, Albuquerque, NM, 11–15 May 2008:

Z. A. Ali, V. Yu. Glebov, M. Cruz, T. Duffy, C. Stoeckl, S. Roberts, T. C. Sangster, R. Tommasini, and S. Throop, "Tests and Calibration of the NIF Neutron Time-of-Flight Diagnostic."

C. G. Freeman, C. Stoeckl, T. C. Sangster, T. Duffy, and C. Mileham, "A Thomson Parabola for the Multiterawatt Laser Facility."

V. Yu. Glebov, M. Moran, C. Stoeckl, T. C. Sangster, and M. Cruz, "Neutron Bang Time Detector Based on a Light Pipe."

M. Storm, C. Guo, D. D. Meyerhofer, J. Myatt, T. C. Sangster, and C. Stoeckl, "Relativistic Electron-Beam Transport Measurements" (invited).

The following presentations were made at the 18th Target Fabrication Meeting, Lake Tahoe, CA, 11–15 May 2008:

M. J. Bonino, D. R. Harding, and L. M. Elasky, "Effects of Target Assembly on the Quality of Cryogenic Ice Layers."

D. H. Edgell, M. D. Wittman, R. S. Craxton, L. M. Elasky, D. R. Harding, and W. Seka, "Three-Dimensional Characterization of Cryogenic Targets Using X-Ray Phase-Contrast Imaging and Shadowgraphy."

L. M. Elasky, S. J. Verbridge, A. J. Weaver, and D. R. Harding, "Success of Layering with DT and Developments with D_2 in OMEGA Cryogenic Targets."

D. R. Harding, T. B. Jones, Z. Bei, D. H. Edgell, and S. H. Chen, "Cryogenic-DT-Foam Targets: The New Frontier."

T. B. Jones, Z. Bei, and D. R. Harding, "Electric-Field-Assisted Target Fabrication."

S. J. Verbridge, A. J. Weaver, D. R. Harding, and L. M. Elasky, "Effects of Process Limitations and Shell Composition on Cryogenic Target Layers."

G. P. Wainwright and W. T. Shmayda, "Tritium Management on OMEGA at the Laboratory for Laser Energetics."

M. D. Wittman and D. R. Harding, "Performance and Capabilities of the Cryogenic Fill-Tube Target Test Facility at LLE."

The following presentations were made at the 38th Annual Anomalous Absorption Conference, Williamsburg, VA, 1–6 June 2008:

R. S. Craxton, P. W. McKenty, J. A. Marozas, and A. M. Cok, "Optimization of Neutron Yields on the NIF from Room-Temperature DT Targets."

J. A. Delettrez, V. N. Goncharov, P. B. Radha, D. Shvarts, C. Stoeckl, B. Yaakobi, A. V. Maximov, W. Seka, J. A. Frenje, J. F. Myatt, T. C. Sangster, and V. A. Smalyuk, "Simulations of the Effect of Energetic Electrons Produced from Two-Plasmon Decay in the 1-D Hydrodynamic Code *LILAC*."

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O. V. Gotchev, P. Chang, J. P. Knauer, D. D. Meyerhofer, R. Betti, F. H. Séguin, C. K. Li, J. A. Frenje, and R. D. Petrasso, "Magnetized Hot-Spot Implosions on OMEGA," ICC 2008 Workshop, Reno, NV, 24–27 June 2008.

T. Pfuntner and S. D. Jacobs, "The Optics Suitcase and Liquid Crystal Mood Patches," Boulder Workshop on Light-Controlled Liquid Crystalline Complex Adaptive Materials, Boulder, CO, 6 August 2008.

The following presentations were made at SPIE Optics and Photonics, San Diego, CA, 10–14 August 2008:

B. Ashe, G. Myhre, D. Mastrosimone, and C. McAtee, "Minimizing Contamination to Multilayer Dielectric Diffraction Gratings Within a Large Vacuum System."

K. L. Marshall, J. Gan, G. Mitchell, S. Papernov, A. L. Rigatti, A. W. Schmid, and S. D. Jacobs, "Laser-Damage Resistant Photoalignment Layers for High-Peak-Power Liquid Crystal Device Applications."

The following presentations were made at the HEDLP FESAC Workshop, Washington, DC, 25–27 August 2008:

W. Theobald, R. Betti, C. Stoeckl, K. S. Anderson, T. R. Boehly, J. A. Delettrez, J. A. Frenje, V. N. Goncharov, V. Yu. Glebov, C. K. Li, R. L. McCrory, D. D. Meyerhofer, L. J. Perkins, R. D. Petrasso, P. B. Radha, T. C. Sangster, W. Seka, A. A. Solodov, B. Yaakobi, and C. D. Zhou, "Driving Gigabar Shocks with High-Power Lasers and Their Applications to Shock Ignition."

W. Theobald, C. Stoeckl, R. Betti, K. S. Anderson, T. R. Boehly, J. A. Delettrez, R. R. Freeman, J. A. Frenje, V. N. Goncharov, V. Yu. Glebov, D. R. Harding, M. H. Key, A. J. MacKinnon, R. L. McCrory, D. D. Meyerhofer, J. F. Myatt, P. M. Nilson, A. V. Okishev, P. K. Patel, R. D. Petrasso, C. Ren, T. C. Sangster, W. Seka, R. B. Stephens, A. A. Solodov, L. Van Woerkom, B. Yaakobi, and C. D. Zhou, "Fast Ignition with OMEGA/OMEGA EP."

The following presentations were made at the Boulder Damage Symposium, Boulder, CO, 22–24 September 2008:

J. B. Oliver, S. Papernov, A. W. Schmid, and J. C. Lambropoulos, "Optimization of Laser-Damage Resistance of Evaporated Hafnia at 351 nm."

S. Papernov and A. W. Schmid, "Laser-Induced Surface Damage of Optical Materials: Absorption Sources, Initiation, Growth, and Mitigation."

The following presentations were made at the 18th Topical Meeting on the Technology of Fusion, San Francisco, CA, 28 September–2 October 2008:

R. Betti, P. W. McKenty, W. Theobald, C. D. Zhou, C. Stoeckl, K. S. Anderson, J. A. Delettrez, D. D. Meyerhofer, V. N. Goncharov, P. B. Radha, T. C. Sangster, A. A. Solodov, V. A. Smalyuk, S. Skupsky, C. K. Li, R. D. Petrasso, J. A. Frenje, L. J. Perkins, D. Shvarts, and A. Schmitt, "Shock Ignition of Thermonuclear Fuel with High Areal Density."

S. F. B. Morse, J. Bromage, C. Dorrer, M. J. Guardalben, J. H. Kelly, B. E. Kruschwitz, S. J. Loucks, R. L. McCrory, D. D. Meyerhofer, J. Qiao, and L. J. Waxer, "OMEGA Extended Performance Short-Pulse Laser: Technology and Operational Flexibility."

J. M. Soures, "The OMEGA Facility: Providing Unique Capabilities for Inertial Fusion and High-Energy-Density Physics Experiments."