

The Principal Investigator Portal Provides a Gateway to Shot Information for External Users



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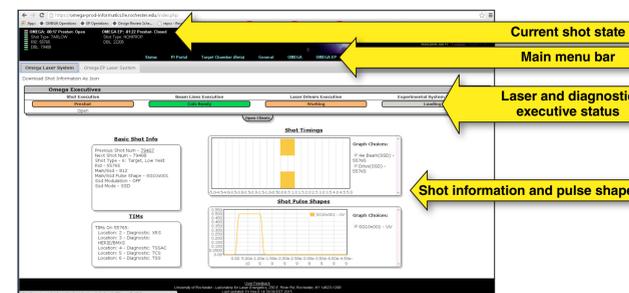
The Informatics group provides a web portal to facility and experimental information, enhancing several Principal Investigator (PI)-centric tools



- The header shows the current shot state and 0.1-Hz system heartbeat for both OMEGA and OMEGA EP
- The status page shows upcoming request ID (RID) information and system state with a link to the previous shot
- The UV average pulse page provides on-shot pulse shape information
- A 3-D view of target diagnostic and beam ports for OMEGA and OMEGA EP
- The facility calendar links to PI proposals, where the PI can put all shot-related documentation
- New diagnostic imaging analysis tools are being developed to allow simple intrashot processing

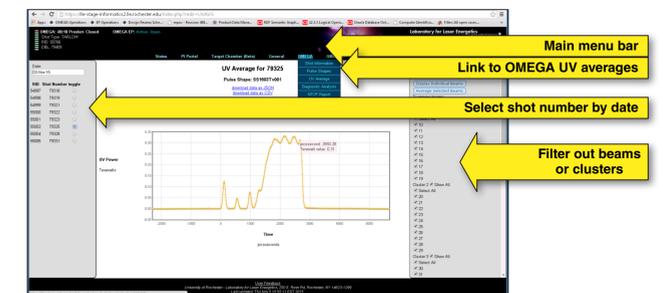
G10764

SSO login takes PI to current shot status page



G10767

Omega on-shot UV pulseshape averages



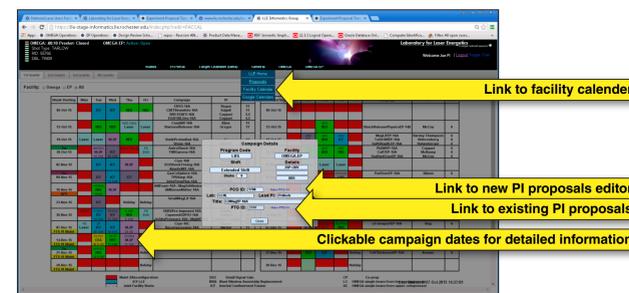
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Access the Laboratory for Laser Energetics (LLE) PI Portal from the main LLE web page



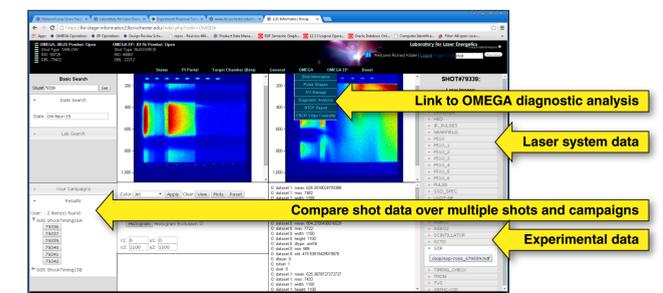
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A new digital calendar page with the same look as the static calendar links PI's directly to their campaign information



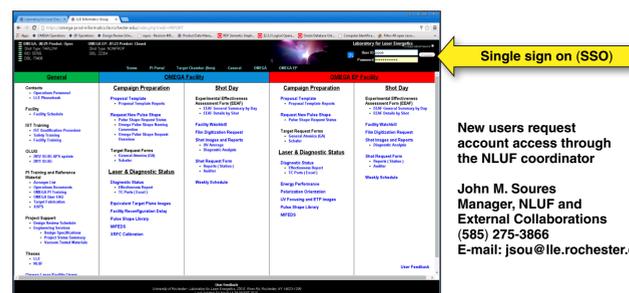
G10768

Trail data analysis page provides new capabilities like shot to shot compare and plotting



G10771

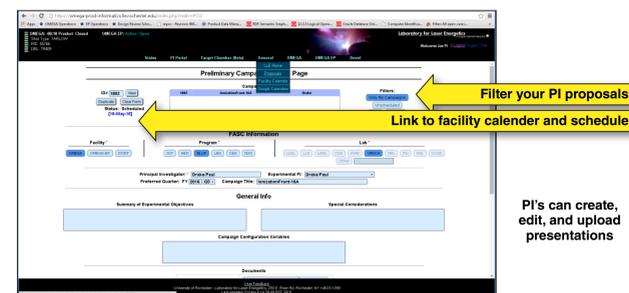
The entry point takes users to the PI portal main login page



G10766

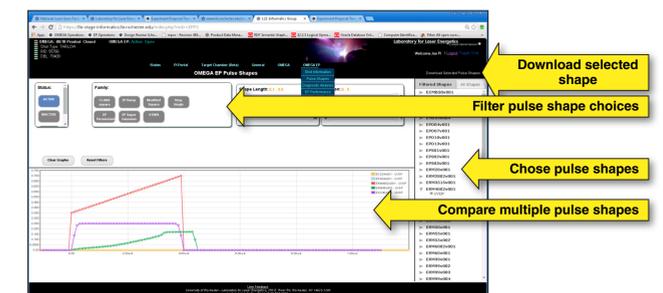
NLUF: National Laser Users Facility

A new PI proposal page is in trail phase, linking PI's directly to their campaign information



G10769

View and download OMEGA and OMEGA EP pulse shapes



G10772

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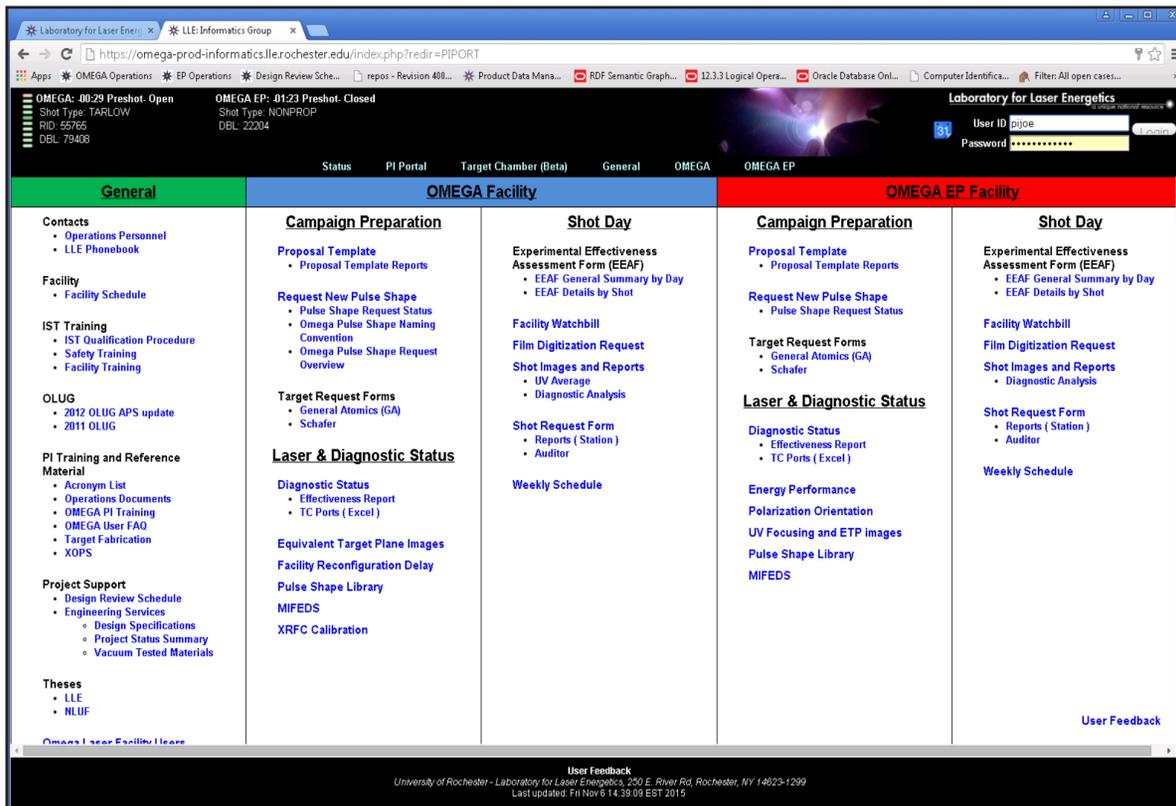
Access the Laboratory for Laser Energetics (LLE) PI Portal from the main LLE web page



The screenshot shows the Laboratory for Laser Energetics website. The main header includes the title "Laboratory for Laser Energetics" and the tagline "a unique national resource". A navigation menu is visible with items like Home, About, Omega Laser Facility, Engineering Services, Safety Zone, Publications, Resources, Site Map, and Phonebook. A dropdown menu for "Omega Laser Facility" is open, showing links for OMEGA, OMEGA EP, **PI Portal** (highlighted with a yellow arrow), Joint Operations, Schedule, and Documentation. The main content area features a "Quick Shot" section with a colorful laser beam image and a "The Graxicon" section with a text description. A yellow arrow points from the "PI Portal" link in the dropdown menu to the "PI portal entrance point" label on the right.

PI portal entrance point

The entry point takes users to the PI portal main login page



Single sign on (SSO)

New users request account access through the NLUF coordinator

John M. Soures
Manager, NLUF and External Collaborations
(585) 275-3866
E-mail: jsou@lle.rochester.edu

SSO login takes PI to current shot status page



The screenshot shows the Omega Laser System SSO interface. The browser address bar is <https://omega-prod-informatics.lle.rochester.edu/index.php>. The top navigation bar includes links for Status, PI Portal, Target Chamber (Beta), General, OMEGA, and OMEGA EP. The main content area is divided into several sections:

- Omega Executives:** A horizontal bar showing the status of various components: Shot Executive (Open), Beam Lines Executive (Cals Ready), Laser Drivers Executive (Working), and Experimental System (Loading).
- Basic Shot Info:** A box containing shot details: Previous Shot Num - 79407, Next Shot Num - 79408, Shot Type - 6: Target, Low Yield, Rid - 55765, Main/Ssd - 812, Main/Ssd Pulse Shape - SG10v001, Ssd Modulation - OFF, Ssd Mode - SSD.
- TIMs:** A box listing diagnostic locations: TIMs On 55765; Location: 2 - Diagnostic: XRS; Location: 3 - Diagnostic: HERIE/BMXS; Location: 4 - Diagnostic: TSSAC; Location: 5 - Diagnostic: TCS; Location: 6 - Diagnostic: TSS.
- Shot Timings:** A graph showing pulse shapes for 4w Beam(SSD) - 55765 and Drive(SSD) - 55765.
- Shot Pulse Shapes:** A graph showing the pulse shape for SG10v001 - UV.

Annotations with yellow arrows point to the following elements:

- Current shot state:** Points to the top status bar showing 'OMEGA: 00:17 Preshot - Open' and 'OMEGA EP: 01:22 Preshot - Closed'.
- Main menu bar:** Points to the navigation bar with links like 'Status', 'PI Portal', etc.
- Laser and diagnostic executive status:** Points to the 'Omega Executives' bar.
- Shot information and pulse shape:** Points to the 'Basic Shot Info' and 'Shot Pulse Shapes' sections.

Footer text: User Feedback, University of Rochester - Laboratory for Laser Energetics, 250 E. River Rd, Rochester, NY 14623-1299, Last updated: Fri Nov 6 14:39:09 EST 2015.

A new digital calendar page with the same look as the static calendar links PI's directly to their campaign information



The screenshot shows a web browser displaying the LLE digital calendar. The interface includes a navigation menu with options like 'LLE Home', 'Proposals', 'Facility Calendar', and 'Google Calendars'. A main calendar grid shows dates from October to December, with colored blocks representing campaigns. A 'Campaign Details' pop-up window is open, showing fields for Program Code (LBS), Facility (OMEGA-EP), Shift, Extended Shift, Shots (6), PCO ID (1700), Lab (LLNL), Title (LDMagEP-16A), and PTG ID (2580). A legend at the bottom explains various symbols and colors used in the calendar.

Link to facility calendar

Link to new PI proposals editor

Link to existing PI proposals

Clickable campaign dates for detailed information

A new PI proposal page is in trail phase, linking PI's directly to their campaign information



OMEGA: 00:10 Preshot - Closed OMEGA EP: Active - Open

Shot Type: TARLOW
RID: 55766
DBL: 79409

Laboratory for Laser Energetics
Welcome Joe PI | Logout | Toggle Chat

Status PI Portal Target Chamber (Beta) General OMEGA OMEGA EP Devel

LLE Home
Proposals
Facility Calendar
Google Calendars

Preliminary Campaign Page

ID# 1802 View
Duplicate Clear Form
Status: Scheduled [19-May-16]

Filters: Only My Campaigns Unscheduled

FASC Information

Facility * Program * Lab *

OMEGA OMEGA-EP JOINT ICF HED NLLUF LBS CEA NXS LLNL LLE LANL CEA AWE UMICH NRL PU SNL UCSD Other

Principal Investigator: Drake/Paul Experimental PI: Drake/Paul
Preferred Quarter: FY 2016 | Q3 Campaign Title: IonizationFront-16A

General Info

Summary of Experimental Objectives Special Considerations

Campaign Configuration Variables

Documents

User Feedback
University of Rochester - Laboratory for Laser Energetics, 230 E. River Rd, Rochester, NY 14623-1299
Last updated: Fri Nov 6 14:39:09 EST 2015

Filter your PI proposals

Link to facility calendar and schedule

PI's can create, edit, and upload presentations

Omega on-shot UV pulseshape averages



The screenshot shows a web application interface for the Laboratory for Laser Energetics. The main content area displays the 'UV Average for 79325' for pulse shape SS1603Tv001. A graph plots UV Power (Terawatts) against Time (picoseconds), showing a pulse that rises around 1000 ps and peaks at approximately 0.31 TW. Annotations on the graph indicate a pulse width of 2650.28 picoseconds and a peak power of 0.31 Terawatts. The interface includes a main menu bar at the top, a date filter on the left, a list of shot numbers, and a selection list on the right. Yellow arrows point to these key features:

- Main menu bar**: Points to the top navigation bar.
- Link to OMEGA UV averages**: Points to the 'UV Average' menu item.
- Select shot number by date**: Points to the 'Date' filter and the list of shot numbers.
- Filter out beams or clusters**: Points to the selection list on the right.

Trail data analysis page provides new capabilities like shot to shot compare and plotting



The screenshot displays the OMEGA data analysis web interface. The interface includes a navigation menu with tabs for Status, PI Portal, Target Chamber (Beta), General, OMEGA, OMEGA EP, and Devel. The main content area shows a comparison of two shots: OMEGA: 00:24 Preshot-Open and OMEGA EP: 01:16 Preshot-Open. The OMEGA EP shot is selected, showing a detailed diagnostic analysis menu with options like Shot Information, Pulse Shapes, UV Average, Diagnostic Analysis, NTOF Report, and CRCR Video Controller. A histogram is visible at the bottom, comparing shot data over multiple shots and campaigns. The interface also displays laser system data and experimental data.

Link to OMEGA diagnostic analysis

Laser system data

Compare shot data over multiple shots and campaigns

Experimental data

View and download OMEGA and OMEGA EP pulse shapes



The screenshot shows the 'OMEGA EP Pulse Shapes' web application. The interface includes a navigation menu with options like 'Status', 'PI Portal', 'Target Chamber (Beta)', 'General', 'OMEGA', and 'OMEGA EP'. The 'OMEGA EP' menu is expanded, showing 'Shot Information', 'Pulse Shapes', 'Diagnostic Analysis', and 'EP Performance'. The 'Pulse Shapes' option is selected. The main content area displays a 'Status' section with 'ACTIVE' and 'INACTIVE' buttons, a 'Family' filter with options like 'CLARA square', 'EP Ramp', 'Modified Square', 'Step, Single', 'EP Picosecond', 'EP Super Gaussian', and 'OTHER', and a 'Shape Length' input field set to '0.1 - 9.9'. A 'Filtered Shapes' list on the right shows various pulse shapes like 'ECMB50v001', 'EPD04v001', 'EPD07v001', 'EPD10v001', 'EPD13v001', 'EPS01v001', 'EPS02v001', 'EPS05v001', 'ERM20v001', 'ERM2802v001', 'ERM3515v001', 'ERM4002v001', 'ERM50v001', 'ERM55v001', 'ERM55v002', 'ERM6002v001', 'ERM60v001', 'ERM99v001', 'ERM99v002', 'ERM99v003', and 'ERM99v004'. A graph at the bottom shows multiple pulse shapes plotted against time, with a legend on the right identifying the shapes by color and name. The graph shows a red pulse (ERM4002v001) with a sharp rise and fall, a purple pulse (ERM4002v001 - UVDP) with a similar shape but lower amplitude, and several other pulses with different shapes and amplitudes.

Download selected shape

Filter pulse shape choices

Chose pulse shapes

Compare multiple pulse shapes