

# The OMEGA Users Group and Workshops: Opportunities for Basic HED Science



# Who are the OMEGA Users?

- 172 scientists – students, academics, researchers-- who come from:
  - 24 Universities
  - Over 20 National laboratories and Centers
  - 9 different countries...

# At our workshop today:

- 115 registrants.....maximum capacity  
(turned folks away after 14 April)
- 45 students/postdocs/young researchers,  
of which 37 were given travel support by  
NNSA grant
- 60 contributed posters and talks ---today  
and tomorrow

# What are the workshop objectives?

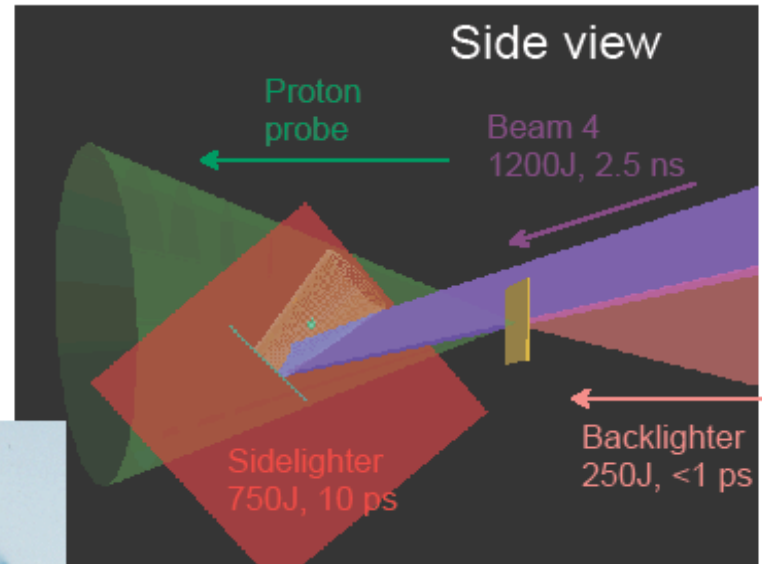
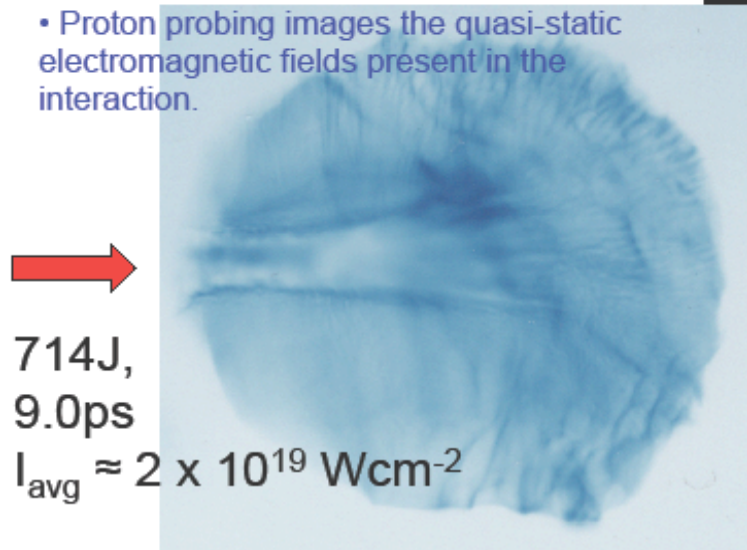
1. To present on-going and proposed research at OMEGA, and to facilitate communications and exchanges amongst the Users
2. To advise and recommend to the OMEGA management ways to improve the facility and to advance HED Science
3. To provide an exciting opportunity for students and postdocs to present and discuss their research in an interactive yet cordial atmosphere
4. To initiate collaborations that can be undertaken in a complementary fashion at NIF, LULI,.....;

An example of cutting-edge results comes from last weeks OMEGA-EP experiments by L. Willingale et al, Poster II-13, and in thur talk.

MichiganEngineering Proton probing of channel formation

L Willingale, A Maksimchuk, K Krushelnick (University of Michigan), PM Nilson, S Craxton, TC Sangster, C Stoeckl (LLE), W Nazarov (University of St Andrews), J Cobble (LANL), PA Norreys, R Scott (CLF, RAL)

- An underdense target is created using B4 to produce a CH plasma plume.
- 750J, 10ps laser pulse propagates through the plasma plume.
- Proton probing images the quasi-static electromagnetic fields present in the interaction.



Poster on last weeks results (Wed pm):  
Omega EP laser propagating through underdense plasma

Talk will focus on the proton probe diagnostic (Thurs pm):  
Proton probing of a 1 kJ, 10 ps laser pulse interaction with underdense to near-critical density plasma

# Announcements:

- Workshop photo at 12:30 in lobby (today)
- Sign up for OMEGA/ OMEGA-EP tours (at lunch today, thru, friday)
- Dinner at Delmonico's ... thur
- Job forum for young researchers (Friday)
- Bi-monthly OMEGA Users Newsletter.... The OUN
- Plans are underway for next years workshop of 27-29 April 2011

# Acknowledgements

- NNSA for travel support of students and postdocs
- To OFES for financial support of the workshop
- To LLE generous assistance and support throughout the entire process