Wrap-up and Action Items for Fall Workshop

Target Design

Riccardo's low-risk low-gain target
- Gain 15 (Lois)
- Operate at ice triple point (David and Andy) – determine SI sensitivity to T-layering
- Design at 2.4e7 implosion velocity (Guy)

Action Item – prepare 1D low-risk low-gain target designs

Riccardo's request for producing I15 300 MB shocks
- How are we going to diagnose this? (Tom B.)

Action Item – Determine if experimental setup is possible

Stefano's work on target positioning
- How can we improve the robustness of a target with ~30um hot spot
- Andy thinks we can over come this with more spike energy
- Do we go to green spikes on the NIF – increased LPI risk? (Pat)
- Or do we portion the beams for lower drive symmetry and higher Pulse energies (Edouard).

Action Item – Determine how we can get more energy into the spike pulse

LPI

The *THING* - during the fuel assembly phase
- We need to measure the hot-electrons directly or convince ourselves that inferring them from the hard x-ray signal is adequate
- Yaakobi's target seems to fit this requirement.
- Can we modify such a target to demonstrate pre-heat mitigation?

Action Item – Determine the appropriate experimental platform for identifying and possibly mitigating preheat during the fuel assembly phase.

The *THING* - during spike pulse illumination
- BEAM Overlap issues
- Can we modify beam focus to demonstrate pre-heat mitigation?

Action Item – Determine the appropriate experimental platform for identifying single beam versus overlapped beams to mitigate spike pulse preheat

The *THING* in general

- Can STUD pulses eliminate or control LPI risks in ICF

Action Item – ***Review STUD pulse experimental results from Trident.***

Future Meetings

Discussion of time and location for next workshops
- Group should get together twice a year to stay connected
- John Perkins offered to hold a workshop in Livermore in the Spring of 2012
- where to schedule the next workshop in 6 months – APS or IFSA?

Action Item – Set-up mini-workshop at either IFSA or APS