

# Summary Slide for Main Achievements of NIF Beryllium Campaign

Andrei N. Simakov, LANL  
for NIF Be team

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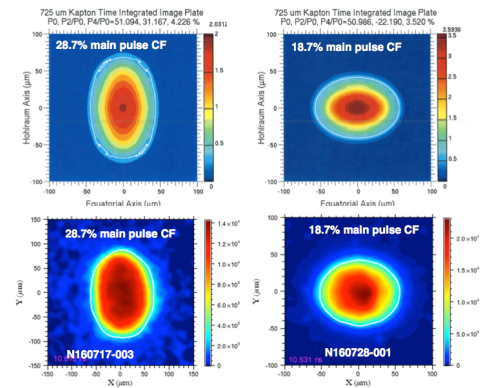
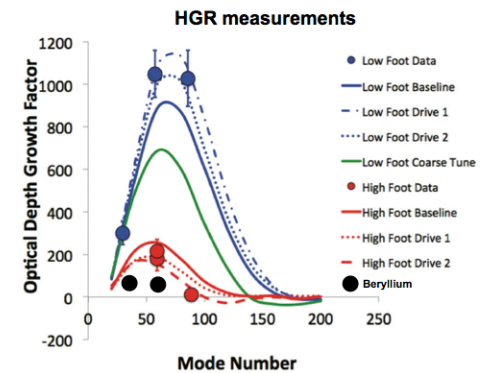
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Slide 1



# NIF Experiments Have Demonstrated Be Ablator Advantages, Are Working Towards Their Utilization

- Enhanced Be ablation properties are expected to provide improved control of the capsule stability and implosion symmetry
  - Strong ablative stabilization → reduced “tent scar”
  - Larger ablation pressure → larger hohlraums
- NIF Be experiments started in August of 2014 and have confirmed
  - Enhanced ablation front stability
  - Very good laser-capsule coupling and **predictive** implosion stability control for 0.8 mm capsules in low-fill 6.72 mm hohlraums, albeit at laser cone fractions ~0.24 (→ suboptimal laser use)
- Upcoming experiments will increase capsule radius to achieve predictable symmetric implosions with optimal cone fractions ~1/3



*Top: Enhanced Be ablation front stability*

*Bottom: Symmetry control of 0.8 mm Be capsule implosions in low-fill 6.72 mm hohlraums*