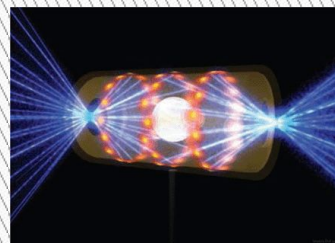


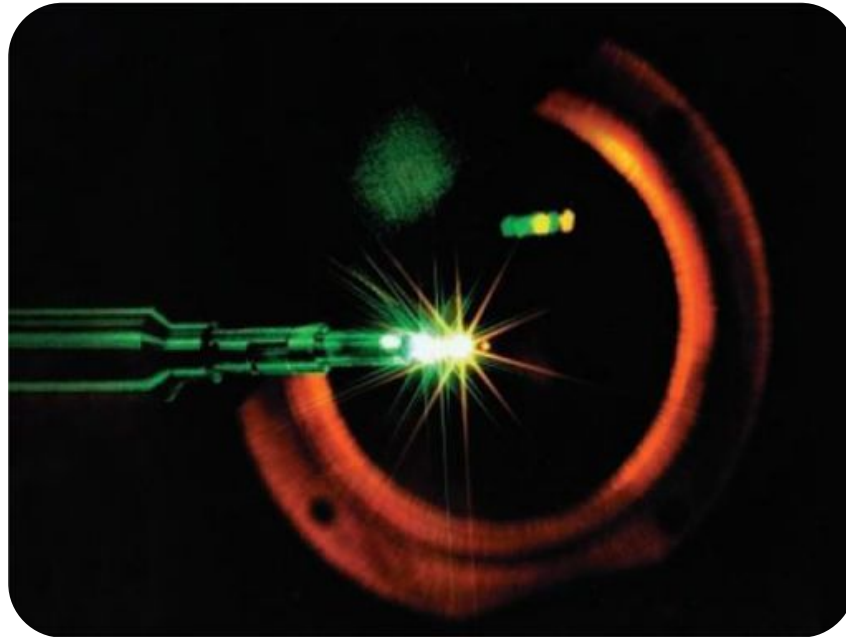
# Description of laser fusion target process

By Salamatin Dimitry  
AMP-28



# What is fusion reaction?

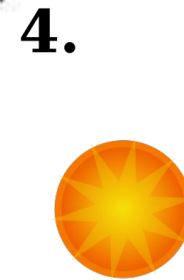
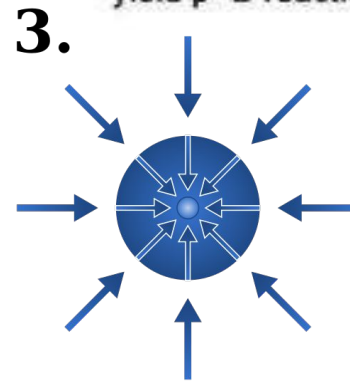
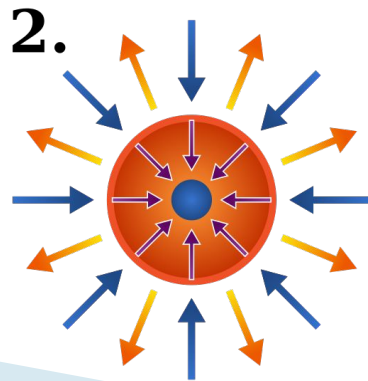
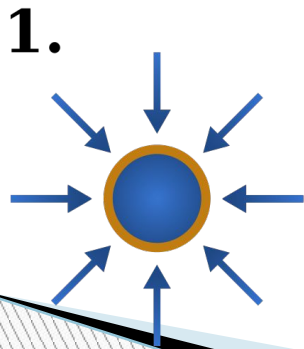
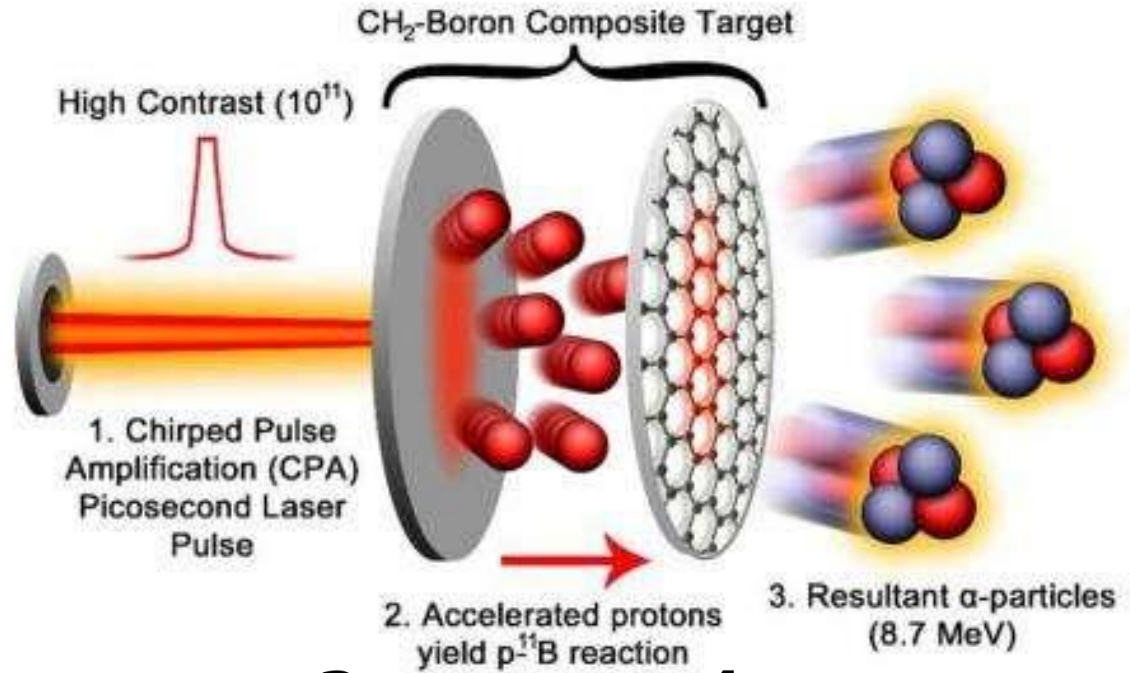
- ❑ Fusion reaction is a process of combination lighter atoms, such as hydrogen, together to form larger ones. Generally the reactions take place at such high temperatures that the atoms have been ionized, their electrons stripped off by the heat; thus, fusion is typically described in terms of "nuclei" instead of "atoms".



Process of fusion reaction

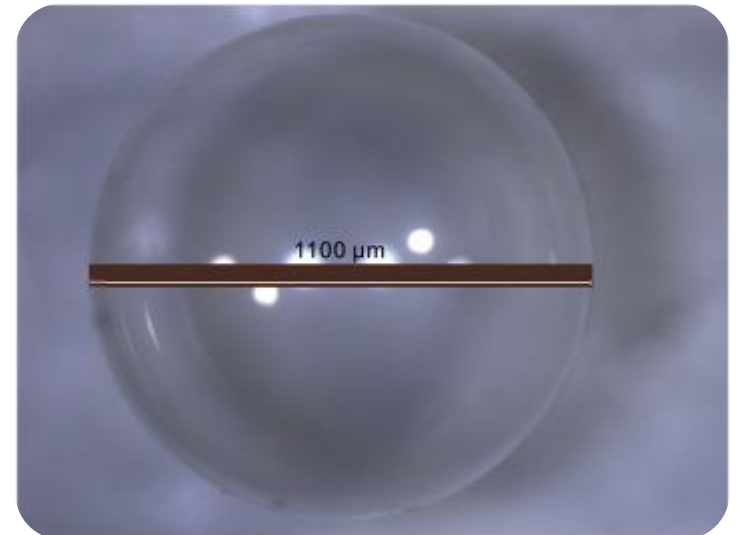
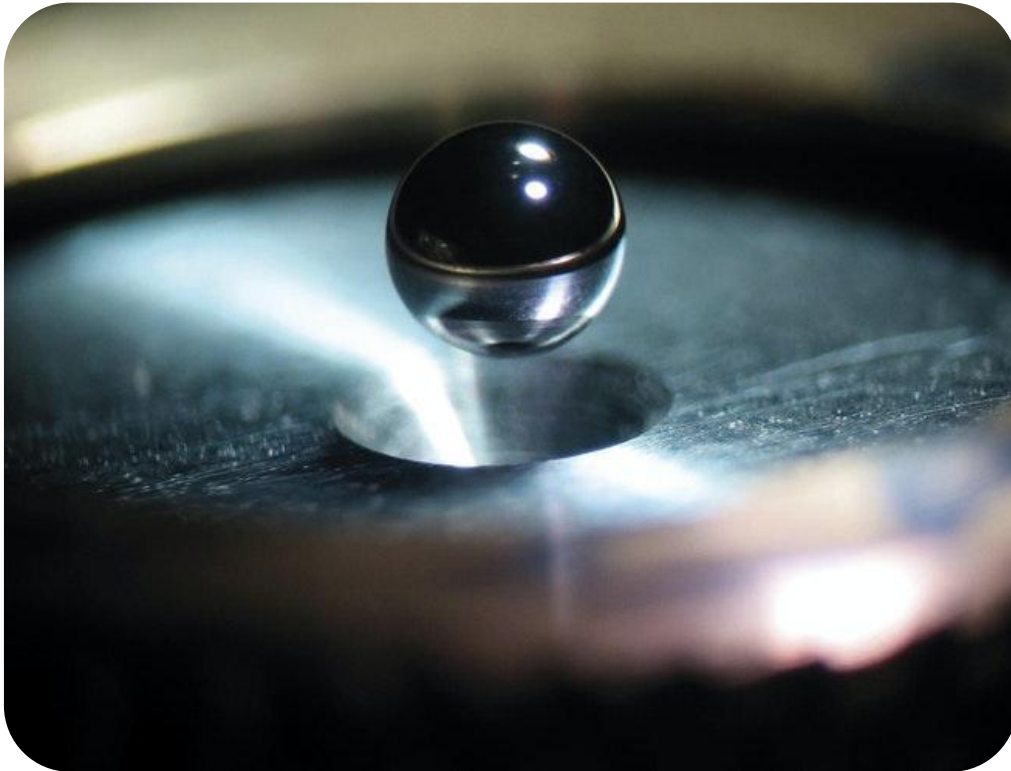


# Physics describe of laser fusion target



# Main conditions

- 1) Perfect uniform glass sphere



Variable wall  
thickness~300 Å



# Main conditions

## □ 2) Laser radiation



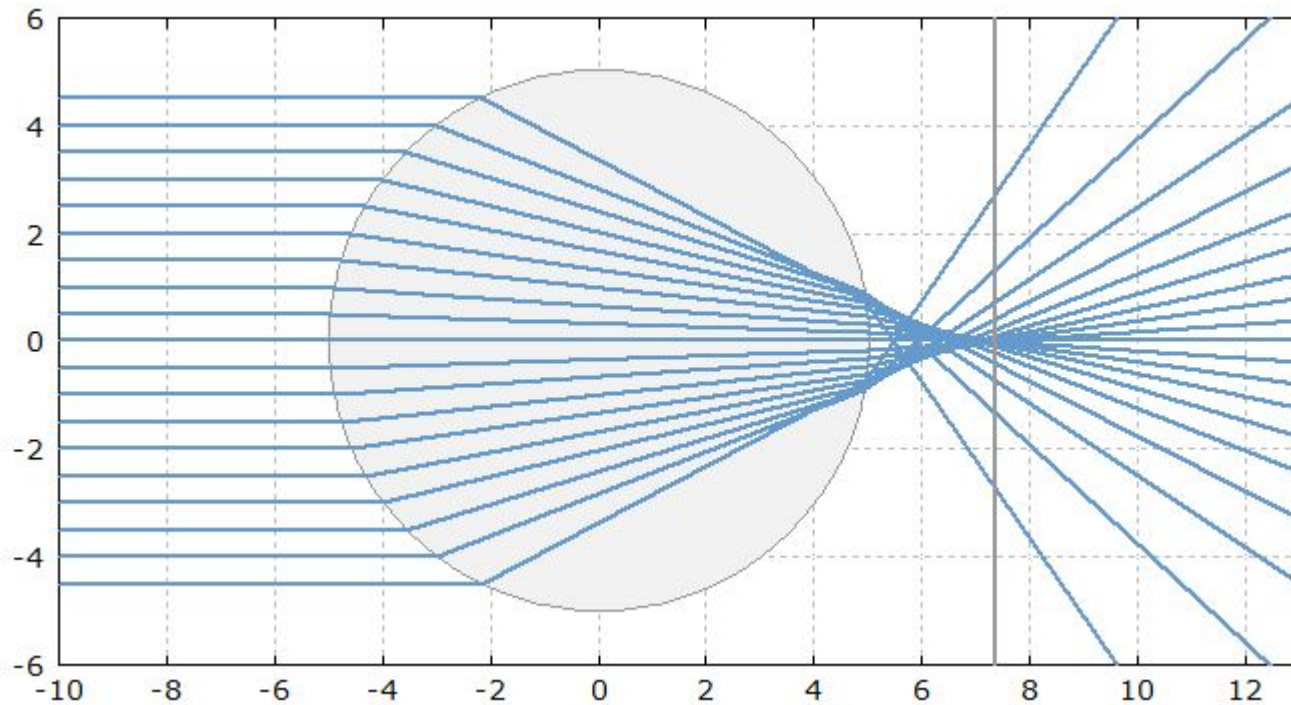
Laser radiation  
intensity is about  
8600 (photons/ $\mu\text{m}^2$ )





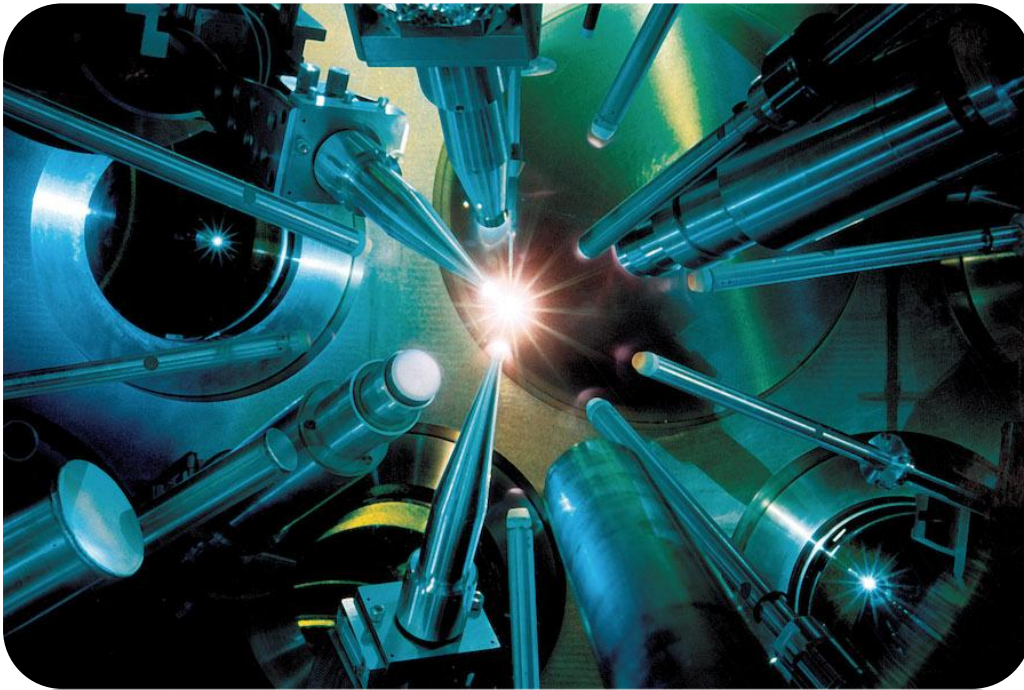
# Main conditions

- 1) Extremely precise beam timing



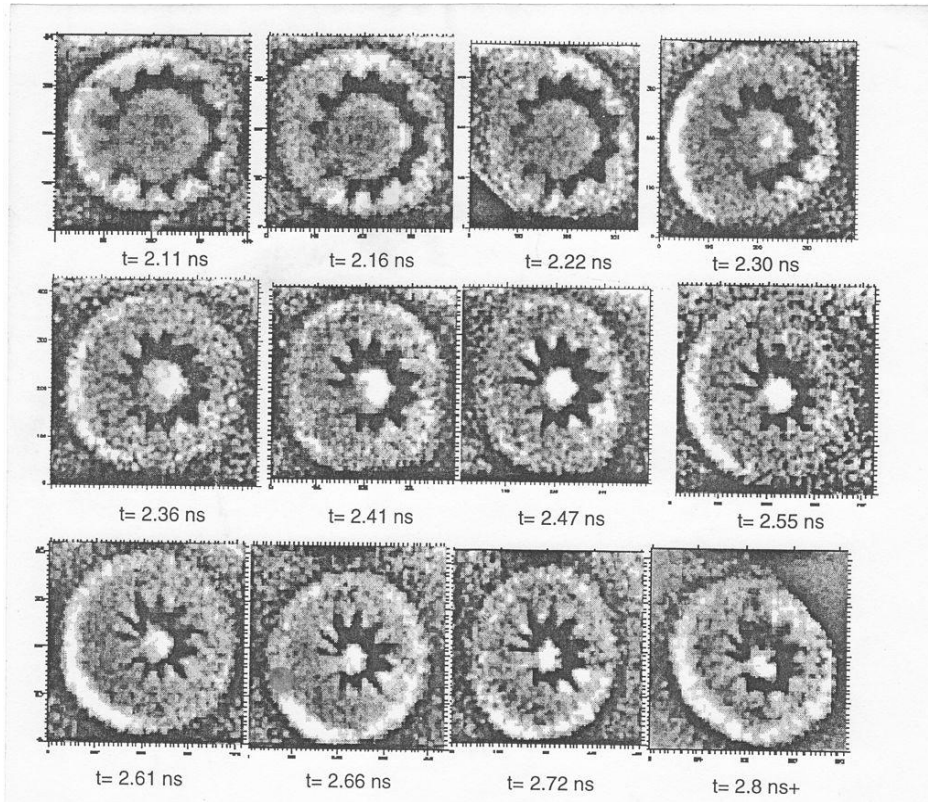
# Main conditions

- 4) High symmetry and high temperatures stability





# Conclusion



Cryogenic substance

Circular compression of laser  
fusion target      Short in 1995

