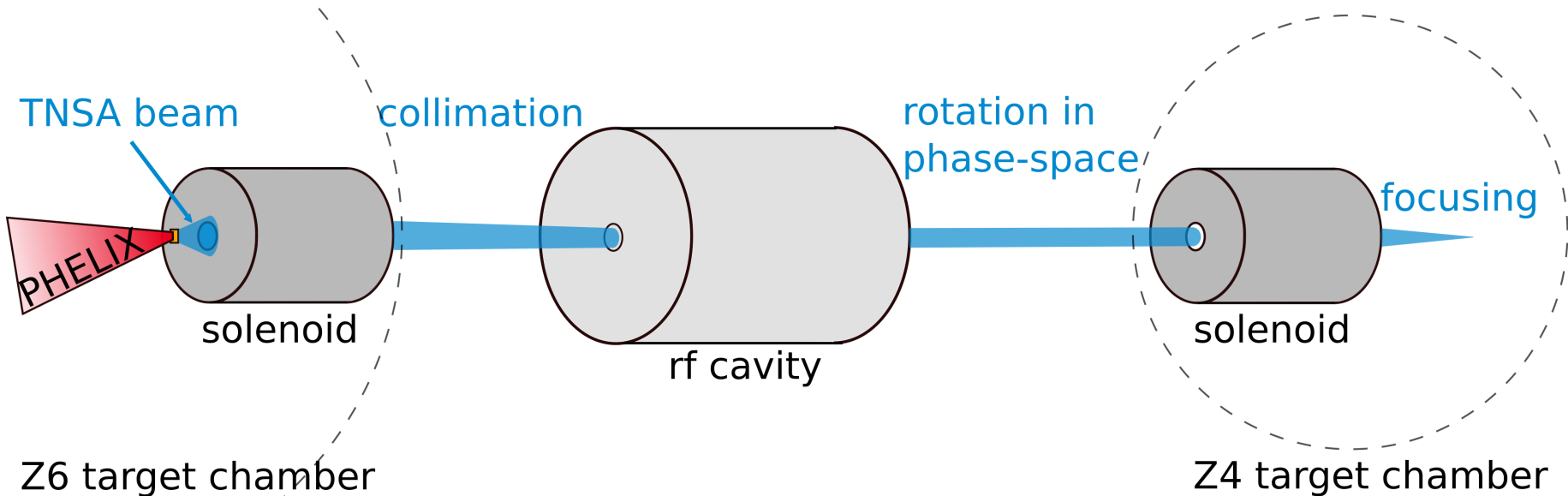
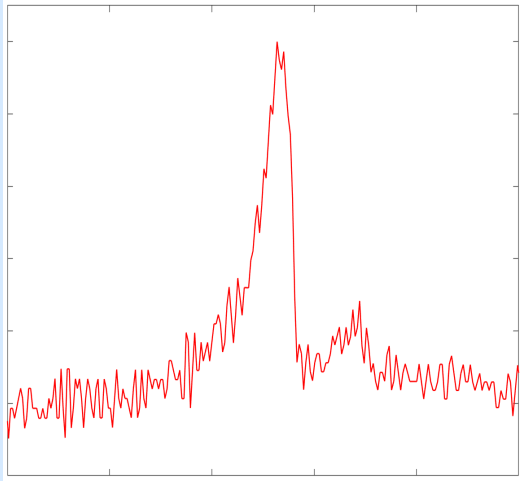


Beam shaping and achieving highest proton intensities with a laser-driven ion beamline

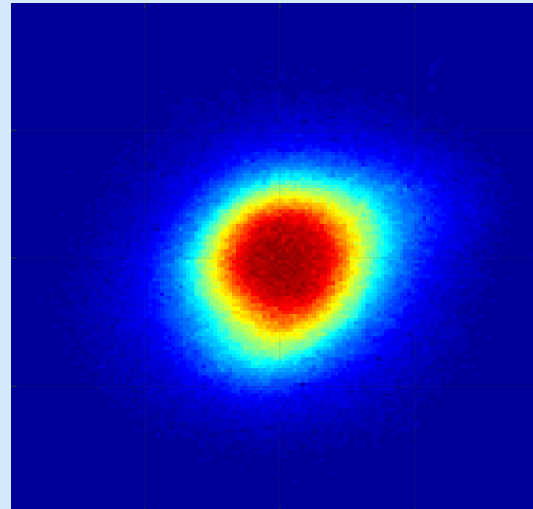


- combination of laser-driven ion sources with conventional accelerator technology
- goal: beam shaping and applications

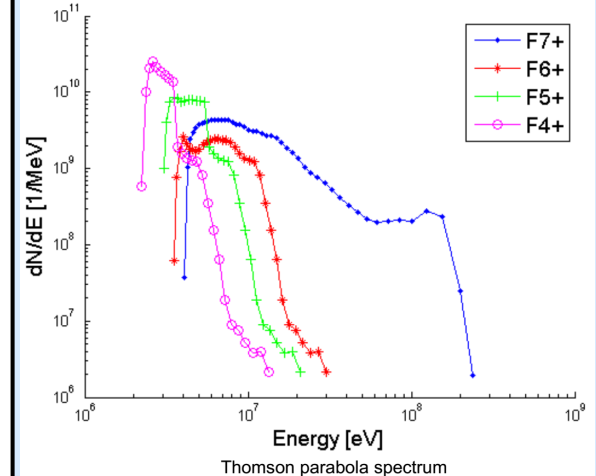
Beam shaping and achieving highest proton intensities with a laser-driven ion beamline



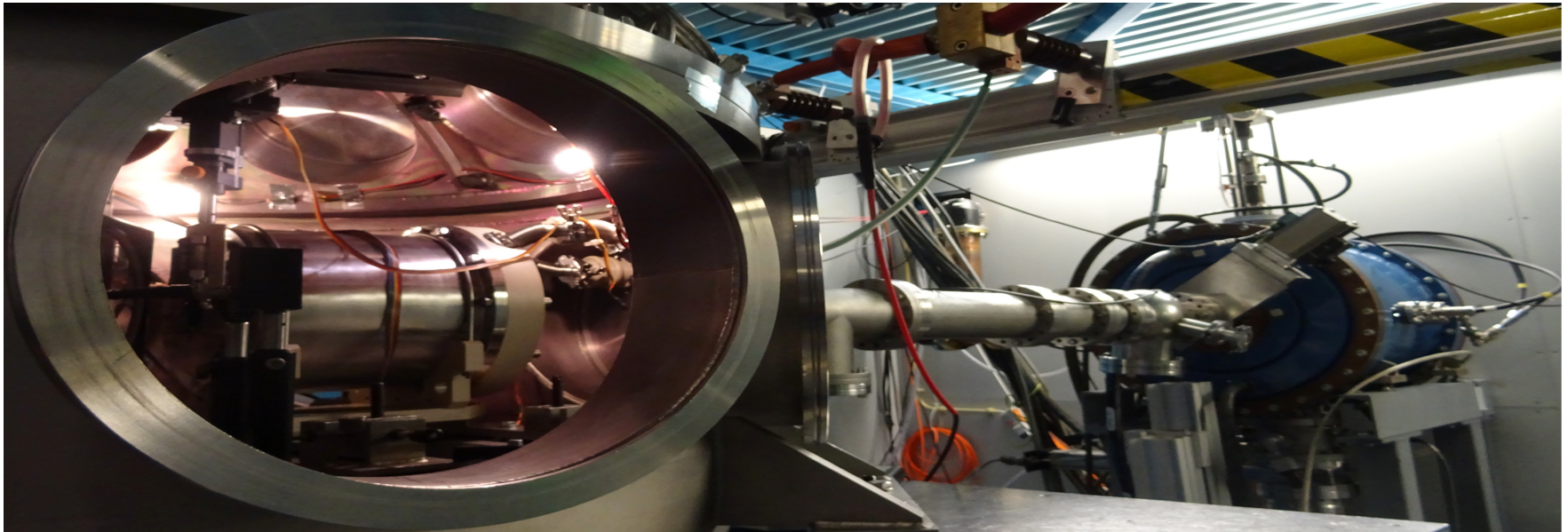
- time compression
- beam transport to 6 m
- bunch FWHM= 458 ps



- focal spot: $1.1 \times 1.2 \text{ mm}^2$
- $N_p = 3.5 \times 10^8$
- $I = 124 \text{ mA}$



- carbon and fluorine acceleration using electric heating



Thank you for your attention!

The experimental team

with the help of
PHELIX team, HF group, target lab and detector lab and the **LIGHT collaboration**