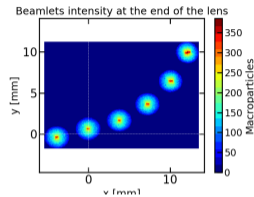
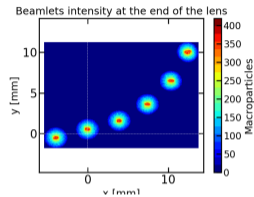
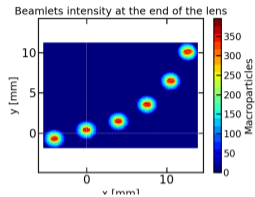
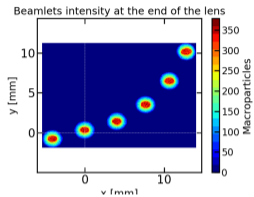


## Updates on simulation of the "IC" lens

Titus Dascalu

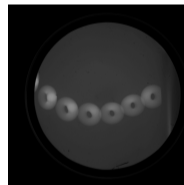
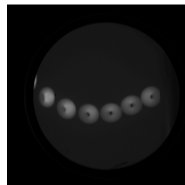
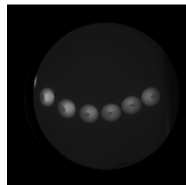
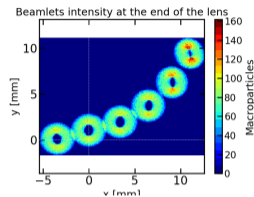
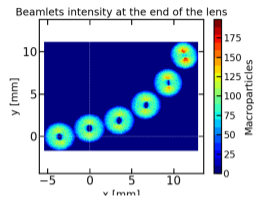
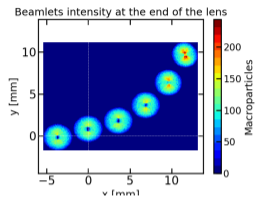
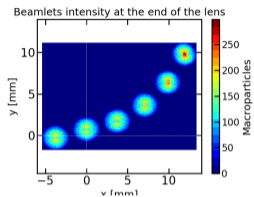
October 29, 2020

# Matching simulation to experiment (1)



→ increasing the current in the coil →

# Matching simulation to experiment (2)



→ increasing the current in the coil →

- ▶ Matching patterns for filling factors of 1-2%

# Reproducing the plots

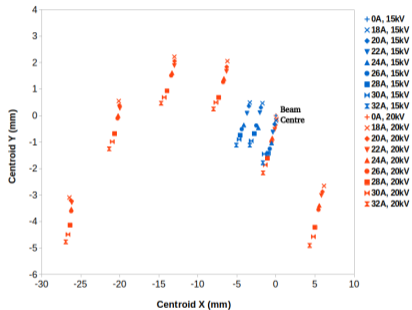
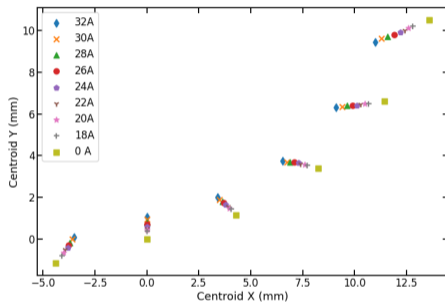
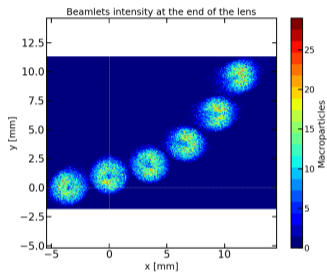


Fig.15 from paper draft

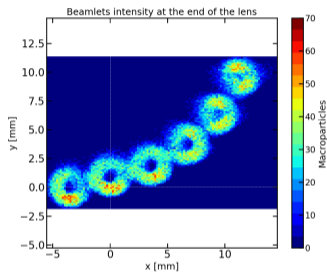


First reproduction attempt

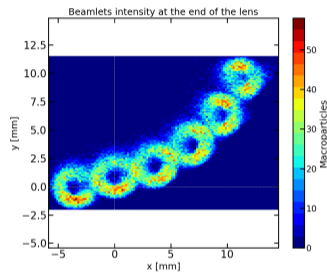
# Non-uniform intensity around the rings



40ns



60ns



100ns

→ increasing period of rotation of plasma column →

- ▶ The beam transit time is  $\sim 22ns$
- ▶ Added a beam energy spread  $\sigma_E = 20\%$