

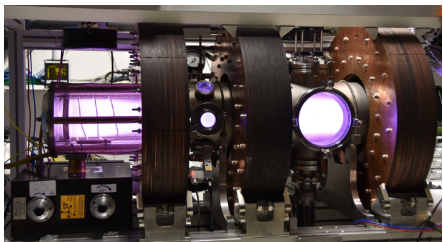
# Non-linear interactions of low frequency waves in a magnetically confined plasma column

Simon Vincent<sup>1</sup>, Victor Désangles<sup>2</sup>, Vincent Dolique<sup>1</sup>, Nicolas Plihon<sup>1</sup>

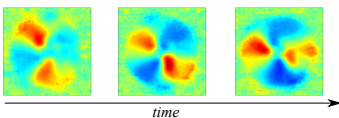
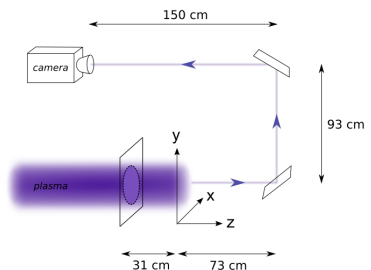
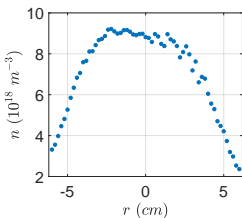
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# A magnetically confined plasma column



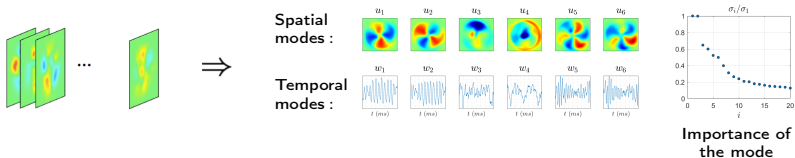
Radial density profile :



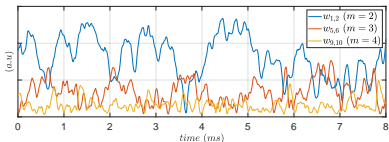
Azimuthal waves, of rotation frequency  $f \in [1 - 100]$  kHz

# Waves interactions, and impact of an emissive cathode

Mode decomposition by POD :



→ Interactions between modes :



Influence of an emissive cathode :

