

CS UPGRADE

Intensity Upgrade

- New magnet, cryostat and coils
- New extraction by stripping for light ion
- New extraction channel
- **Increase source efficiency**
- **Improve source-cyclotron matching**

Extraction by stripping limited to light ions

Expected beam intensities: 10^{13} pps
(estimated for nuclei up to ^{20}Ne)

Heavier nuclei: extraction method same as now

Expected also an increase of beam intensities due to the improvement of matching conditions and efficiency increase

NUMEN



- Investigation of Nuclear Matrix Element of neutrinoless double beta decay through the study of Double Charge Exchange reaction
- ISGM using FRIBs beams
- DCE and 4n transfer using HIB

NEWCHIM

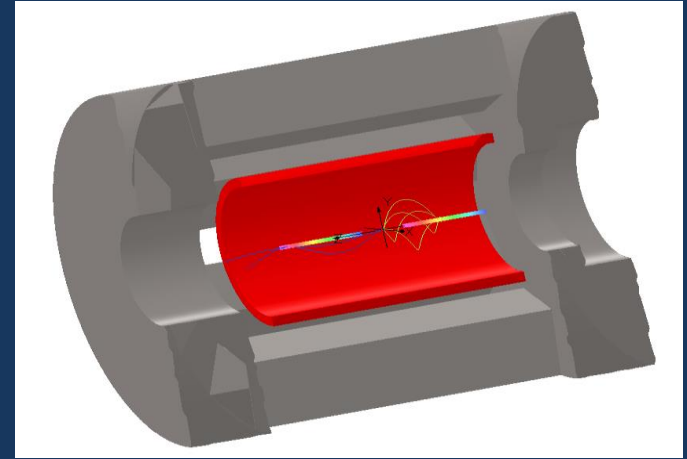


Investigation of cluster structure in light nuclei (FRIBs beams)

FARCOS array coupled to CHIMERA
(improve energy and angular resolution)

Role of Isospin on the reaction mechanism (stable and unstable heavy ions using the new Fragment separator)

LNS-STREAM



Feasibility study: Spectrometer for light charged Particles using SOLE magnetic to field (HELIOS –like)

- Study of direct reactions using FRIBS beams