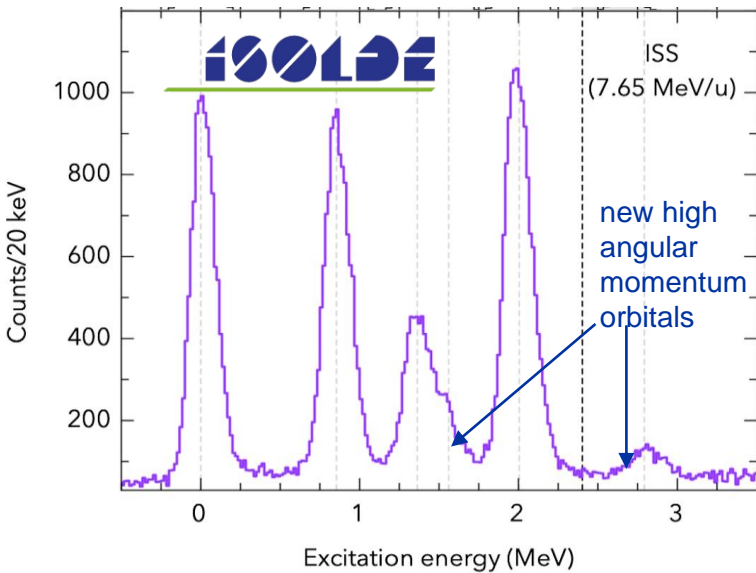




Coordinator report

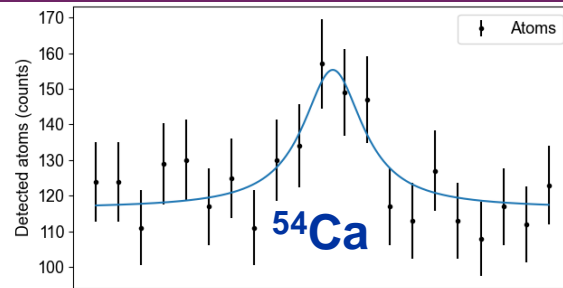
Hanne Heylen (EP-SME)

Feedback from runs since June



IS529 – ^{54}Ca @COLLAPS

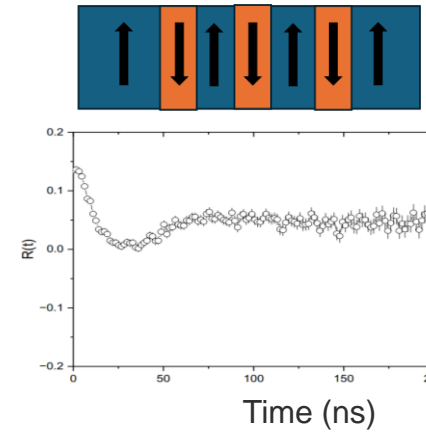
- Shed light on the magic nature of the $N=32$ and $N=34$ shell closure
- Sensitivity record : First collinear laser spectroscopy with < 1 ion/sec, using ROC technique



^{53}Ca
 $T_{1/2}$: 461 ms
 6 ions/s

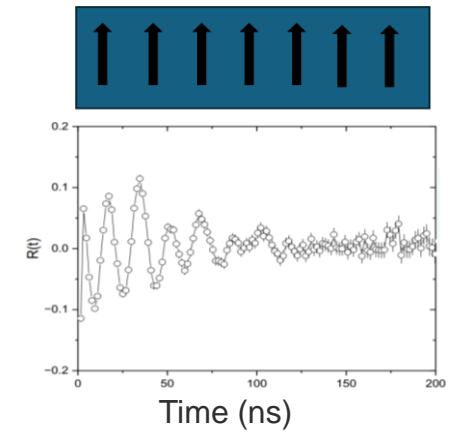
^{54}Ca
 $T_{1/2}$: 90 ms
 1 ion/s

PPLN



^{111}mCd probe in the domain walls

SD



^{111}mCd probe in regular Li-sites

IS742 - $^{132}\text{Sn}(d,p)^{133}\text{Sn}$ @ISS

- High angular momentum single-part. states outside double-magic ^{132}Sn .
- For the first time, ALL the valence single-neutron orbitals outside the doubly-magic core have been observed.

IS760 - Lithium Niobate Domain Walls

- Single domain poled (SD) and periodically poled lithium niobate (PPLN) samples were investigated using ^{111}mCd and the PAC technique
- significant improvement in terms of understanding the local scale phenomena

Issues since June

- After a series of incidents during the 111mCd PAC beam time in June, no runs in GLM/GHM and 508 offline labs are allowed (until the end of the year)
 - Affects solid state physics runs (Moessbauer, PAC, EC-SLI, ...) and all collections
 - GLM/GHM runs can run in parallel to central beam line → negative effect on shifts for physics
- 2 power cuts (2nd Sep., 17th Oct.) during HIE-ISOLDE run → followed by several shifts of recovering everything before runs could resume in good conditions
- Several runs on HRS using RILIS experiences instable beam (unclear reason, no problem on GPS)
- IS702 (132SnS for Miniball) was cancelled before it started due to target problems
- Missing mass marker for CRIS run, required ad-hoc target change
- On top of the several issues with targets, beam instrumentation, REX/HIE-ISOLDE, ...
 - 9-Gap
 - Cavities tripping (intervention)
 - Target degrading
 - Broken of tape in tapestation
 - Faraday cups breaking
 - ...

I've added contingency time in schedule, especially since September

Statistics 2024 (cut-off 22nd October)

	Experiments	LOIs	Coordinator's Reserve	Total
Scheduled runs	32 runs, 30 distinct IS-numbers, (9 HIE-ISOLDE)	10	7	49/47 distinct
Runs which received beam	28 runs, 26 distinct IS-numbers, (8 HIE-ISOLDE)	6	7	41/39 distinct
Scheduled shifts	342 (123 HIE-ISOLDE)	36	42	420
Counted shifts	224 (83 HIE-ISOLDE)	25	Not applicable	249
Delivered shifts	260 (89 HIE-ISOLDE)	29	52	340

- Coordinator's Reserve: Ad hoc measurements after issues, beam development during period where no run could be scheduled, extended stable beam for commissioning of detectors (should be LOI ...), ...
- Difference between counted and delivered shifts: run longer (start early, ...) than foreseen, shifts for CR can not be counted
- Reference full year 2023 (~2 weeks shorter than 2024)
 - 63 runs, 50 distinct IS/LOI (10 HIE-ISOLDE)
 - 518 (148 HIE-ISOLDE) scheduled, 424 (122 HIE ISOLDE) counted and 490 delivered shifts