

ILIMA minutes: video conference Collaboration Board on 7th April 2017

Present: Taka Yamaguchi (Chair), Helmut Weick, Yuri Litvinov, Christophor Kozhuharov, Klaus Blaum (intermittent connection), Roman Gernhauser (only for later parts), Phil Walker

1. Phase-0 experiments

The focus of the meeting was to discuss arrangements for phase-0 experiments with the ESR (2018-2019). The first round of proposals has a deadline for submission of 31st May 2017.

- (i) 205Tl half-life: not an ILIMA-led experiment, though there could be participation.
- (ii) 188Hf isomers: ToF detectors would give better efficiency for beam use, on account of the ability to make frequent injections into the ESR. Discussions with Wolfgang Plass are needed. PW could work on the case with WP. Most likely needs 208Pb beam.
- (iii) $N \approx 126$ masses below 208Pb: as (ii) with 208Pb beam, though different ESR setting.
- (iv) CRYRING experiments: a proposal would be premature, though this can be reconsidered for a 2nd-round (2018) submission.
- (v) Beta-delayed neutrons: technical developments required; 238U beam would be needed for 211Hg, 213Tl candidates.

Discussion: At least one proposal is needed, which should be unique for the GSI-ESR facility, i.e. no overlap with Lanzhou or RIKEN. The above options fit this criterion. The best chance for new physics would be from 188Hf isomers, and $N \approx 126$ masses. HW will perform yield calculations, and discuss the use of ToF detectors with WP. Technically, the combination of upgraded ToFs and high data rates would lead towards the requirements for operation with the full FAIR capabilities. Perhaps 188Hf isomers and $N \approx 126$ masses could be put together in a combined proposal. Preliminary test time with a parasitic beam could also be useful.

2. Other matters

- (i) Schottky TDR: two separate TDRs are planned
- (ii) ToF TDR: Natalia is working on it.
- (iii) Pocket detectors TDR: RG is working on it and intends to have a draft ready in June.
- (iv) Slovenia's FAIR contributions are under discussion.
- (v) No progress with decapole trim coils.
- (vi) The dates for the 2017 STORI conference (in Japan) have been fixed: 14-18 Nov.

3. Next meeting:

This is to be arranged by TY in mid-May (i.e. ahead of the 31st May proposals deadline). Note that the remote-conference audio and video were unsatisfactory, especially the difficulties in hearing clearly what was being said.

Notes taken by Phil Walker.