

# Minutes of the Ninth Meeting of the Physics & Instrumentation Task of the EURISOL Design Study

The Galileo Galilei Institute for Theoretical Physics, Florence

T10-09, Florence, 180108

**Present:** E. Běták, P.G. Bizzeti, A. Bonaccorso, Z. Dlouhý, B. Fernandez Dominguez, P.T. Greenlees, V. Lapoux, A. Olmi, N.A. Orr, R.D. Page, C. Petrache, E. Pollacco, B. Roeder, M. Veselsky

1. **Minutes of previous meeting and matters arising:** Accepted.

2. **Update on specimen experiments and instrumentation:**

a) [Neutron detection schemes for knockout and break-up reaction studies](#) B. Roeder reported on his recent simulations comparing the acceptance and energy resolution for a representative modular neutron detector array and a neutron detector wall. Proposals for optimising the performance for certain EURISOL experiments were discussed.

b) **Sweeper magnet, ancillary detectors and the Transfer Reaction Array** No report.

c) [Integrated charged particle and  \$\gamma\$ -ray detector system](#) B. Fernandez Dominguez presented a talk during the preceding EURISOL User Group workshop on her simulations and the recent experiment using TIARA+MUST2+EXOGRAM+VAMOS at SPIRAL, which would serve as an in-beam validation of some of the design concepts. No further presentation was made at the meeting.

d) [Cryogenic and polarized targets](#) F. Marechal presented a talk on recent developments in this area during the EURISOL User Group workshop. Discussions on how to incorporate these into detection systems for EURISOL will continue.

e) **Recoil separator** P.T. Greenlees reported that it was still planned to repeat the in-beam test with VAMOS to validate the recoil separator design concept, although a date for this had not yet been fixed.

3. **Preliminary cost estimates and layout:** R.D. Page presented the draft report, which had been circulated to sub-task leaders for input but still required information for some instruments. The final deadline for submitting the report is imminent.

4. **Other news of progress from sub-tasks:** No reports were received.

5. **Future milestones and deliverables:** The next deliverable after the preliminary report due now concerns the in-beam validation of design concepts. Suggested experiments included secondary fragmentation cross section measurements, the VAMOS tests, the TIARA + MUST2 + EXOGRAM + VAMOS experiment and tests of FAZIA prototypes. This deliverable is due for October 2008. The final deliverable is the final report on the cost estimates, which is due for December 2008.

6. **Joint task meeting at Orsay on 7<sup>th</sup> January 2008:** R.D. Page reported briefly on the meeting.

7. **Issues for EURISOL DS Management:** Some institutions had still not received the second allocation of funding, which was causing problems. In particular, without the money it would not be possible to extend PDRA positions at some institutions.

8. **Any Other Business:** E. Pollacco suggested that instrumentation requiring future research and development effort for EURISOL should be identified in the final report. These could include active targets, such as ACTAR, and neutron detectors.

9. **Date & venue of next meeting:** To be decided. Possibly in late September/early October to prepare for milestones. A meeting in June is also a possibility if an extensive report is required.