TSR@ISOLDE Collaboration issues

Proposed Agenda:

- 1) TSR@ISOLDE Collaboration
- 2) Planning
- 3) Working groups
- 4) Next steps

1) TSR@ISOLDE Collaboration

7 TSR@HIE-ISOLDE Collaboration

The present proposal on a storage ring facility at HIE-ISOLDE brought together 125 scientists from 44 institutions located in 19 countries, who form the TSR@HIE-ISOLDE Collaboration.

The organization of the collaboration foresees the following administrative posts: a Spokesperson and two Deputy Spokespersons, the Physics Coordinator and a Deputy Physics Coordinator, a TSR Technical Coordinator and an ISOLDE Technical Coordinator, an ISOLDE Contact Person, and a HIE-ISOLDE Contact Person. At the time of submission of the present proposal, these positions are filled as follows:

Spokesperson

Deputy Spokesperson

Deputy Spokesperson

Physics Coordinator

Deputy Physics Coordinator

TSR Technical Coordinator
ISOLDE Technical Coordinator

ISOLDE Contact Person
HIE-ISOLDE Contact Person

Klaus Blaum

Riccardo Raabe

Phil Woods

Peter Butler

Yuri A. Litvinov

Manfred Grieser

Erwin Siesling

Yorick Blumenfeld/Maria Borge

Fredrik Wenander

1) TSR@ISOLDE Collaboration

Furthermore, the collaboration has a Board which consists of the persons serving at the above administrative posts and of two conveners from each of the physics cases proposed in the present proposal. At the time of submission of the present proposal, the following were serving as conveners:

Reaction Experiments
Atomic Physics Experiments
Astrophysics Experiments
Neutrino Experiments
Atomic Effects on Nuclear Lifetimes
Isomeric Beam Experiments
Dielectronic Recombination on Exotic Nuclei
Laser Spectroscopy

Peter Egelhof & Dennis Mücher Daniel Savin & Stephan Schippers Shawn Bishop & Rene Reifarth Thierry Stora & Christina Volpe Fritz Bosch & Takayuki Yamaguchi George Dracoulis & Phil Walker Carsten Brandau & Andreas Wolf Kieran Flanagan & tba

TSR@HIE-ISOLDE is an open collaboration and new conveners will join in the Board if new physics cases are proposed at a later time.

→ We need more specific numbers and 2-3 key experiments!

2) Planning

2014 2015 2016

Installation of TSR@ISOLDE

	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Funding												
Building construction work												
Building infrastructure												
disassembly of TSR at MPIK												
Transport to CERN												
Assembly of TSR@ISOLDE												
Power and Electronics												
Begin Commissioning												

3) Working groups

Working Group	Participating Institutions					
Electron Cooler / Electron Target	MPIK / Uni Giessen / CERN					
Gas Target	MPIK / Uni Frankfurt / UK Universities					
Diagnostics	MPIK / GSI					
Setup & Commissioning	MPIK / CERN					
Control System	CERN					
Particle Detectors	TU Darmstadt / TU Munich /					
	GSI / KU Leuven / UK Universities					
EBIT/S & Injection / Extraction	MPIK / CERN					

- → Contact persons for the integration team.
- → Work needs to be done concerning targets, detectors, diagnostics, EBIT, ...

4) Next steps

Mandate of the TSR Integration Study Working Group (Paul Collier)

<u>Membership</u>

The members of the working group are E. Piselli, E. Siesling and F. Wenander. They will involve CERN specialists as and when necessary.

Reporting

The working group will report to the Director of the Accelerator and Technology Sector and for technical matters on progress to the IEFC

<u>Milestones</u>

A report summarizing the integration study will be submitted to the Director of the Accelerator and Technology Sector by Q3 2013.

4) Next steps

Mandate of the TSR Integration Study Working Group

A report covering the following aspects should be prepared:

- An inventory of all equipment to be brought to CERN for installation.
- Initial estimates for the infrastructure needed for the ring and it's transfer lines. This should include the overall space, power, cooling and safety needs. It should not include a detailed design of these systems.
- For each system a brief study of the equipment to be installed should be undertaken after discussion with the experts in Heidelberg and the concerned CERN groups. This study should include:
 - The issues associated with the integration of the equipment into the CERN accelerator environment.
 - The spare situation for the equipment together with any issues or recommendation concerning additional spares.
 - o A radiological assessment of the equipment in collaboration with RP.
 - The control system presently used for the system and whether the control hardware must be replaced to meet CERN standards.
 - Any specific costs associated with the initial installation, or the modification to meet CERN standards should be estimated.
- Any other information or issues for the integration of the TSR at CERN.

A lot of work for the integration group and people from MPIK (Manfred).