

Minutes of the TITAN Meeting

Held on the 26th of January, 2009

Present: Maxime Brodeur, Thomas Brunner, Paul Delheij, Jens Dilling, Stephan Ettenauer, Melvin Good, Alain Lapierre, Matthew Pearson, and Ryan Ringle

EBIT

Alain presented simulations for the EBIT injection and extraction (without electron beam). The settings suggested by the simulation are close to the currently used settings. (Alain has also double-checked the magnet field as used in SimIons by a finite-element simulation of the field.) A conclusion of the simulation is that if ions are off axis in the EBIT they are very likely not extracted because they are hitting walls at places where the beamline is narrow. Hence, it is crucial to inject on axis (because ions would be trapped and extracted off axis, too, if injected off axis). On-axis injection will be also important for charge breeding.

To test if the beam is injected on axis we would need a position sensitive MCP, which will be placed in the center of the beamline. This requires reproducible positioning of the MCP. Another way would be by scanning through voltages applied to lenses; the scanning needs to be automatized to make the process feasible.

Action Items:

- x) How could we perform the scanning?
- x) Proper detector set up to determine beam position and size
- x) look for prize of a position sensitive MCP

MPET

Several masses were seen the beam from the RFQ. Among those, H₃O was identified, which comes in large amounts. At A=58, C₃H₈N was found, which is a molecule used in pump oil. It is speculated that it origins from the ISAC pump.

For a pulse drift tube a better power supply is needed, because the current one is not stable.

CPET

Mel needs some inputs concerning design changes.

We need a place where to put the magnet when it arrives at TRIUMF, Mel would prefer to place it close to the door in the ISAC hall. Talk to Gordon, and then to Dough about this.