

TRIUMF status report

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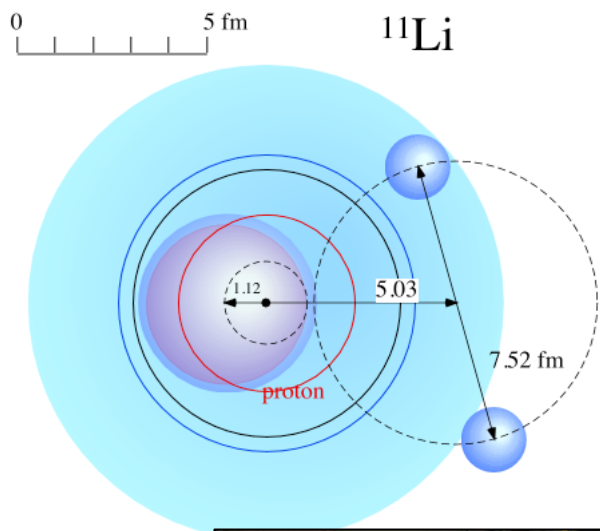
CAP07/IPP AGM

Recent Accomplishments

- First operation of ISAC II
- First RIB experiment: with MAYA
- First operation at 100 μ amps
- Tier 1 data centre for ATLAS funded (CFI-SFU)
- New M20 Beamline funded (CFI-SFU)
- CNSC licence to operate until 2012 obtained April 1st with conditions

MAYA Experiment

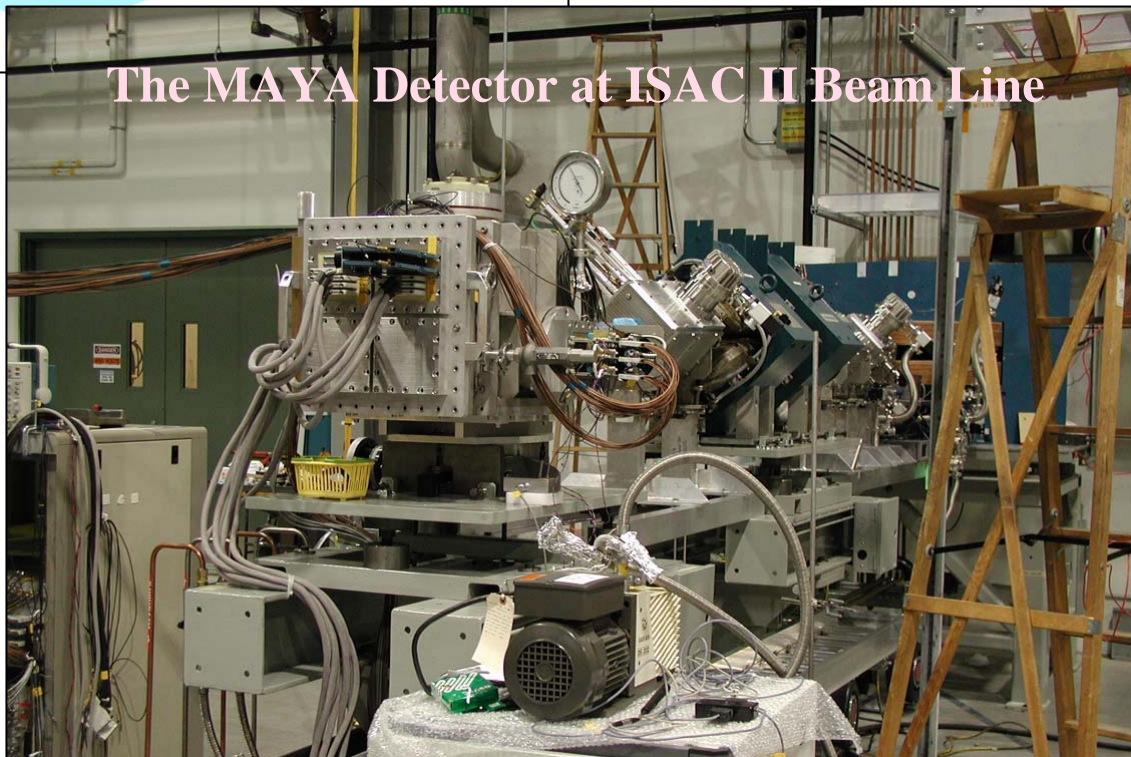
^{11}Li (average geometry)



Neutron correlations
studies E1055/ E1078

Tanihata/Savajols

The MAYA Detector at ISAC II Beam Line



TRIUMF Centre Costs

Capital (4 yrs)

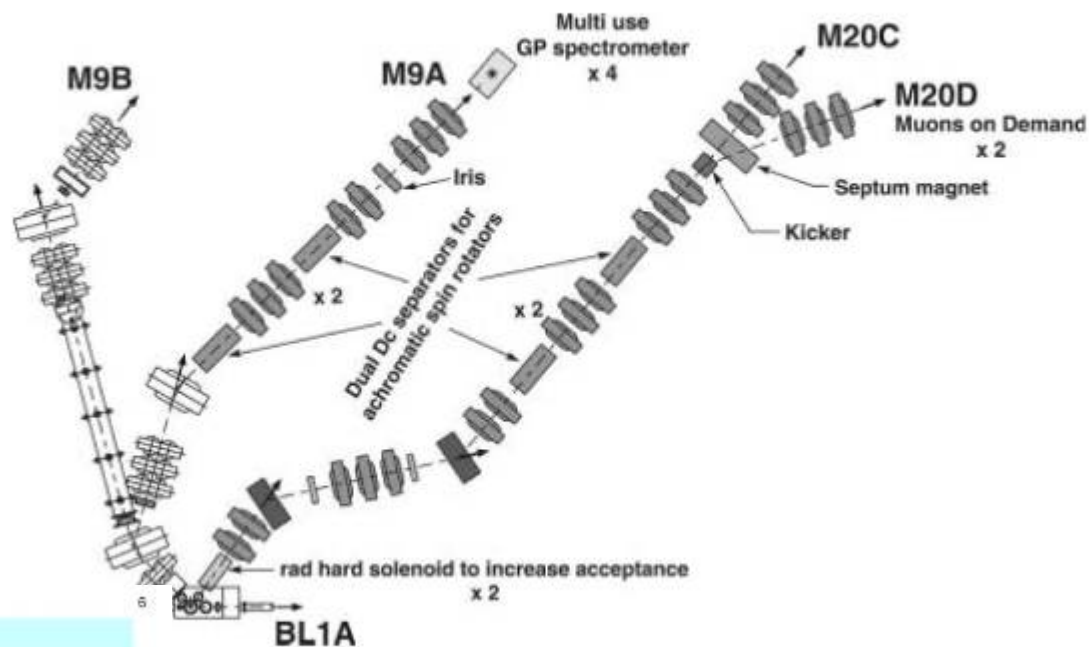
Item	To 2009
<i>Hardware (k\$)</i>	17,735
<i>Infrastructure (k\$)</i>	1,500
<i>Personnel (k\$)</i>	1,515
<i>Software & Training (k\$)</i>	140
Sub-Total (k\$)	20,890

Operating (5 yrs)

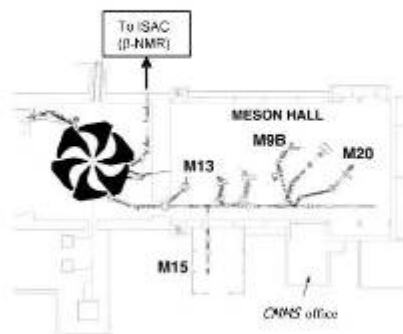
Item	To 2010
<i>Supplies (k\$)</i>	225
<i>Power (k\$)</i>	434
<i>Maintenance (k\$)</i>	235
<i>Personnel (k\$)</i>	2,210
Sub-Total (k\$)	3,104

Infrastructure being installed \$750K. In ISAC II.

Muon Beam Lines from T2, Five Years from Now?



CMMS Beam Line Resources



Current Muon Beams

- M15 surface muons
- M20 surface muons
- M9B decay muons

Future Muon Beams

- M9A surface muons
- M20 replacement

OpCom November 2006

Science Division Plans for 2007

ISAC:

- Complete ^{11}Li program with MAYA
- TiTAN first mass measurement (^{11}Li), Complete Vud program for ^{74}Rb
- Tigress exp at ISAC II (Heavy Na coulomb excitation, ^{12}Be structure)
- Febiad Source (Ne or F campaign)

ISAC

- EMMA tendering process
- LaC target test, Actinide target test license application

Meson Hall

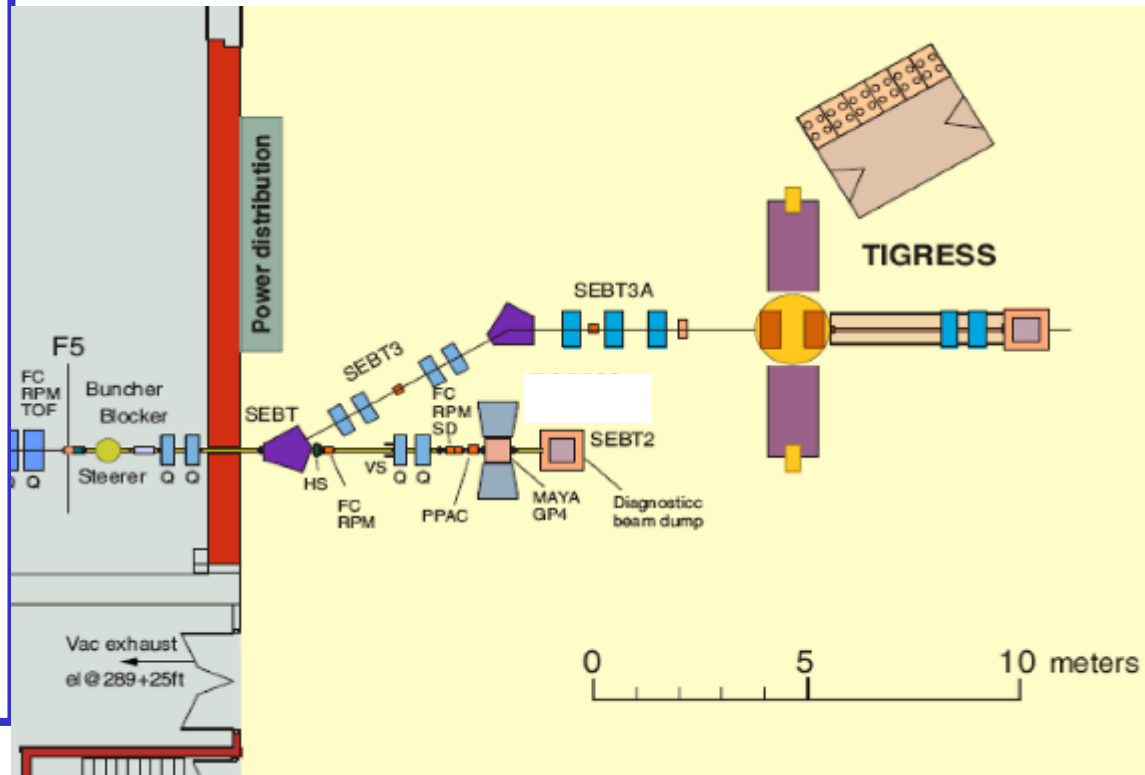
- M9A refurbishing / M20 upgrade.(CFI grant \$6M)
- TWIST data taking ends
- Pienu test in M9A (positron removal) Move to M13 after TWIST decommissioning

Particle Physics (infrastructure support):

- Atlas Tier I centre operation 24/7, Hardware acquisition, User support
- T2K ND280: TPC mod 0, FGD assembly and electronics, OTR construction
- T2K –Neutrino facility: Remote handling, beam monitor

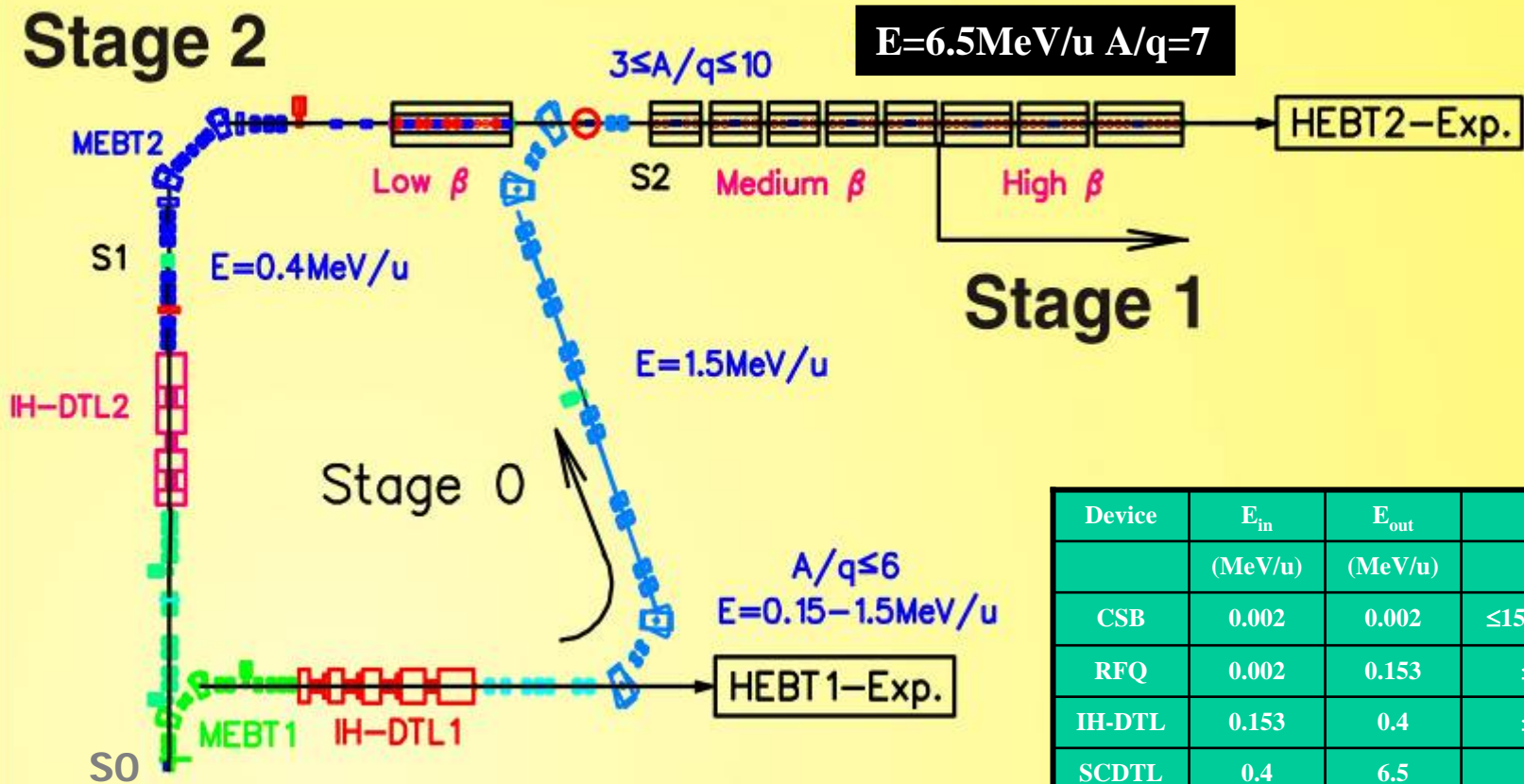
ISAC-II Experimental Beamlines Phase 1

- SEBT2: General purpose
 - for MAYA DEC/06
- SEBT3A: for TIGRESS commissioned by June/07
- TIGRESS (full mechanical structure with 6 HPGe detectors and Bambino) installed and ready for first experiment by July/07



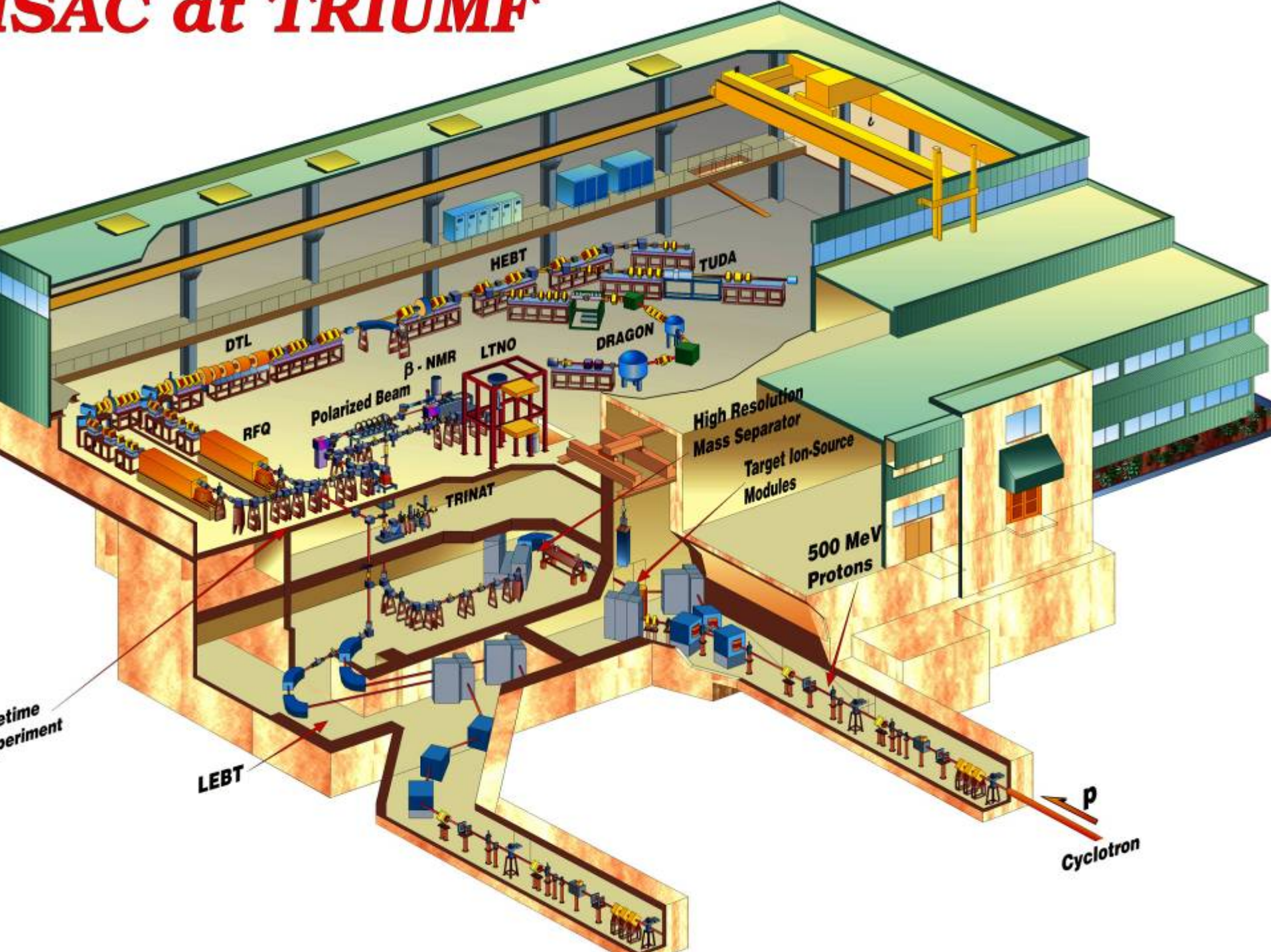
Stage 2 - 2011

Stage 2



Device	E_{in} (MeV/u)	E_{out} (MeV/u)	A/q	V_{eff} (MV)
CSB	0.002	0.002	$\leq 150 \rightarrow \leq 30$	-
RFQ	0.002	0.153	≤ 30	4.5
IH-DTL	0.153	0.4	≤ 30	7.5
SCDTL	0.4	6.5	7	42.7
	0.4	14	3	42.7

ISAC at TRIUMF



New vision for TRIUMF

From Nigel's presentation to ACOT May 11th 2007

- Strong synergies with Superconducting Radio Frequency (SRF) technology
 - Developing SRF technology already with **ISAC-II**
 - First Canadian high tech **industry** partner (PAVAC) established (LCFOA member)
 - **ISAC-III photo-fission** e-driver development
 - Energy Recovery Linac (**ERL**) technology for a possible Canadian **4th generation light source**
 - Canadian Light Source collaboration developing
 - GDE & Fermilab **ILC** collaboration developing
 - TRIUMF joined **international** SRF Collaboration

Actions taken towards realizing the Vision

- MOU in preparation with FERMILAB and ILC GDE
- MOU in preparation with KEK and RIKEN
- MOU in preparation with DESY
- Regular meeting with PAVAC
- Working group on e-SC-Linac
- User group workshop Aug 1-3

Strategy for “Vision” financing

- Next CFI competition: identify lead university and lead spokesperson
- BC government involvement: building proposal to include Second BL, expansion of ISAC target vault, tier-1 centre ,office space,...
- UBC commitment for land use
- Technology transfer activities

AUG(1-3) user workshop

- Electron LINAC's M.deJong/S.Koscielniak
- Phys motivation for ISAC-III : Davids/Butler
- RIB from Photo fission: K-H Langanke/J.Beene
- TeV detectors development: C.Oram/D.Karlen
- Material science: R.Kiefl
- UNC workshop (planned for Sept 13/14)
- SNOLAB?

Personnel changes

- Competition underway for
 - Accelerator division head
 - Search committee chaired by S.Peggs(BNL)
 - Engineering division head
 - Search committee chaired by D.Karlen
- Science Division reorganization being discussed
- Life Science program reevaluation with BCCA/UBC/TRIUMF

TRIUMF consortium

L'Université de Montréal is now a full member {rather est maintenant un membre à part entière}

Several requests to join as full member but will have to wait for resolution of the CNSC clause between Universities and Triumf Accelerator Inc.