

# Optimizing the LE experimental area for ARIEL

TRIUMF

Nov 08 2019

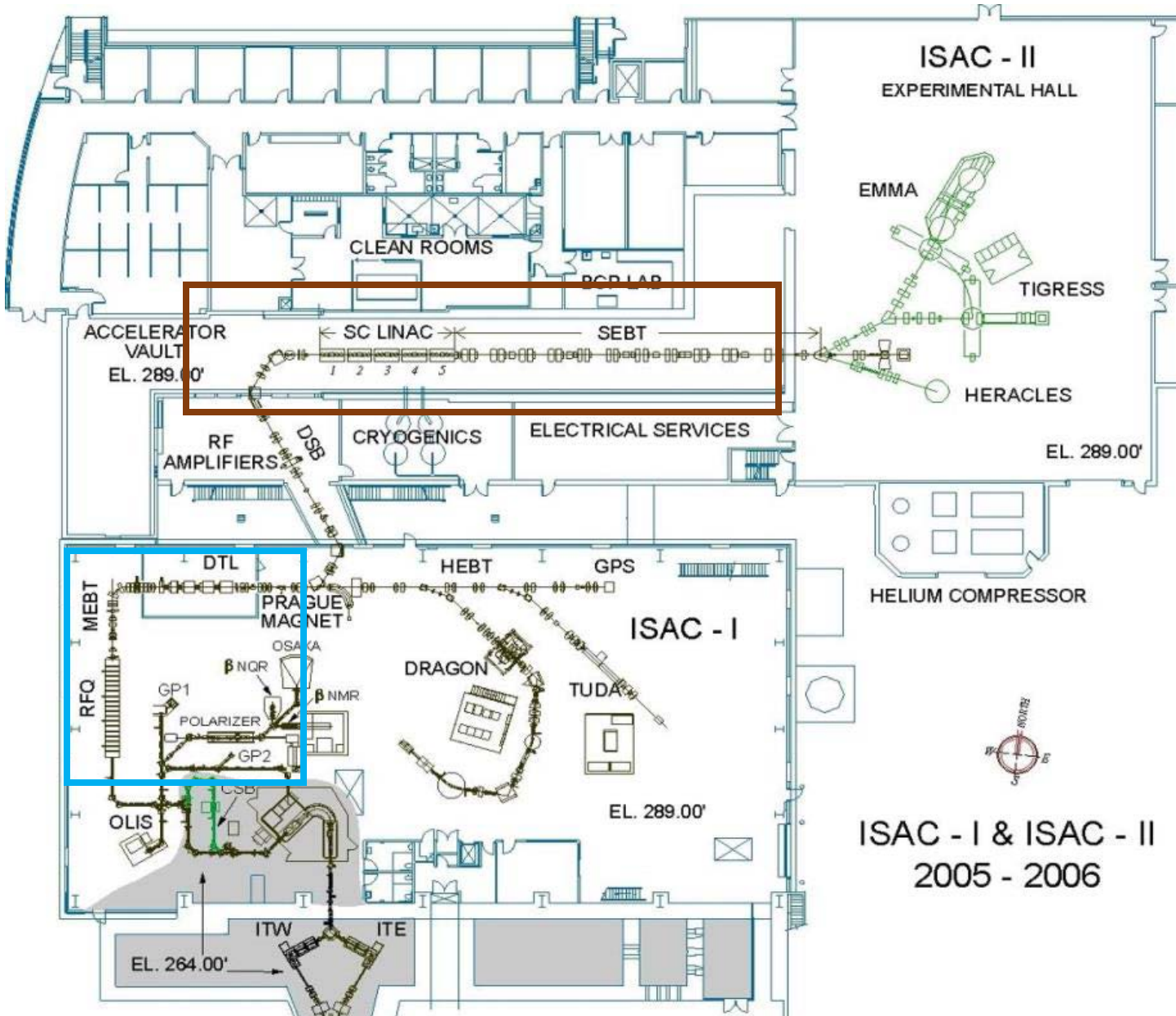
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2019-11-08



# ISAC accelerator complex

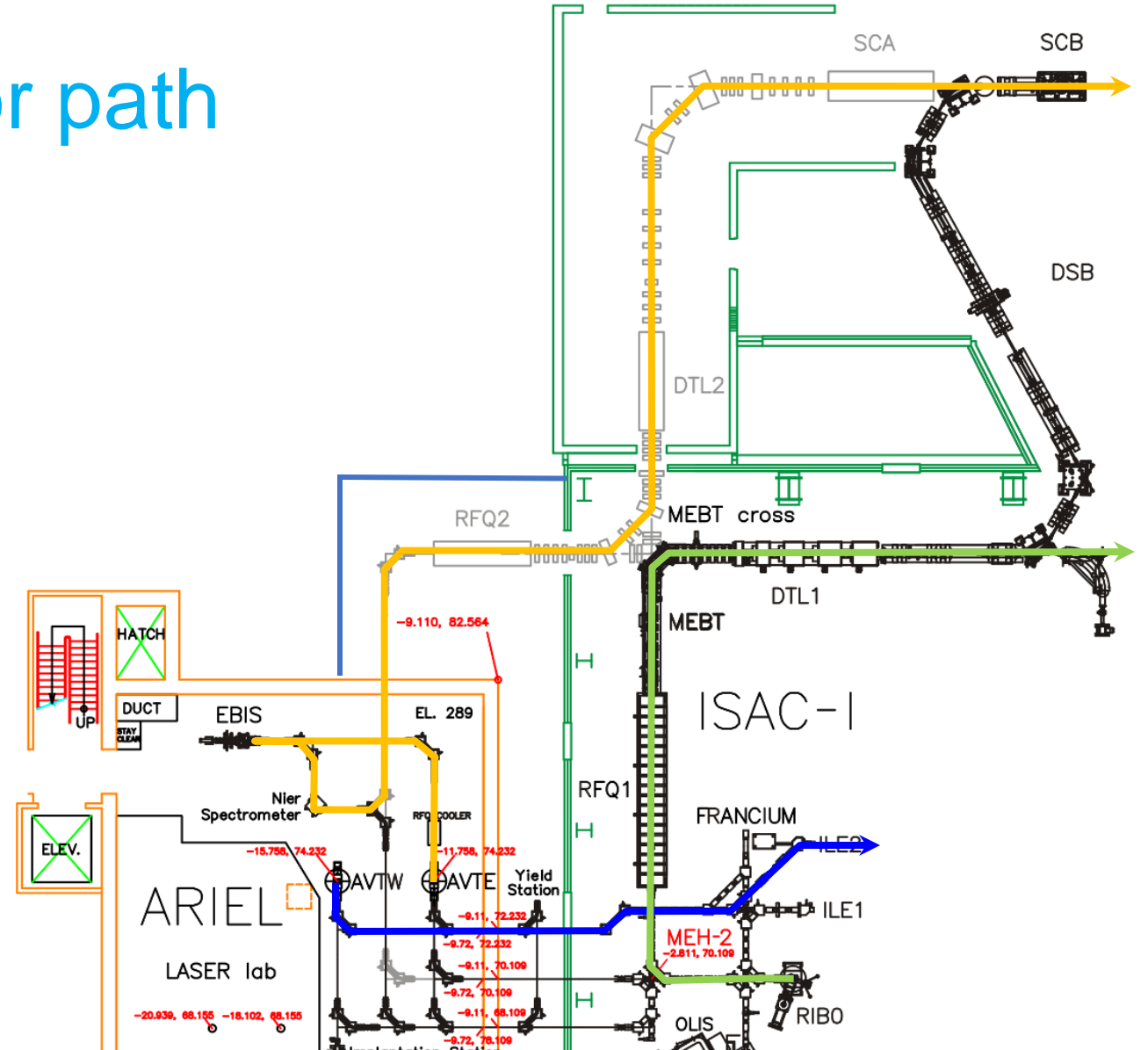


## Isotope Separator and Accelerator facility - ISAC

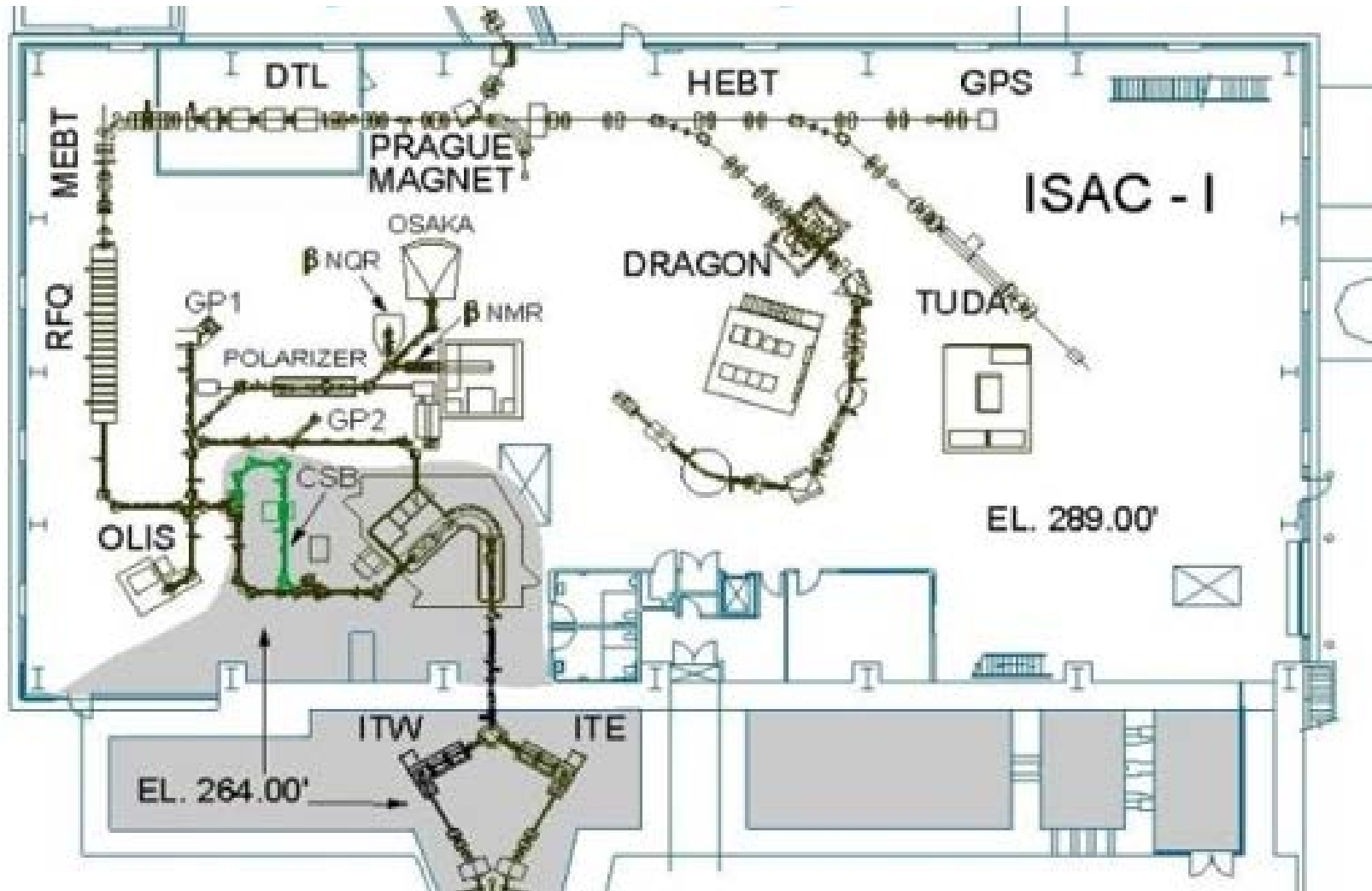
- ISAC-I: Normal conducting-linac, 0.15-1.5 MeV/u
- ISAC-II: Superconducting-linac, 5-15 MeV/u

# ISAC-III second accelerator path

- A second accelerator path for 3 independent beam lines:
  - Low energy
  - Medium energy
  - High energy
- No new capabilities, but flexibility
- Cost for accelerator chain and enclosure: approx. \$M10-15
- Can we justify this? When would we do this?



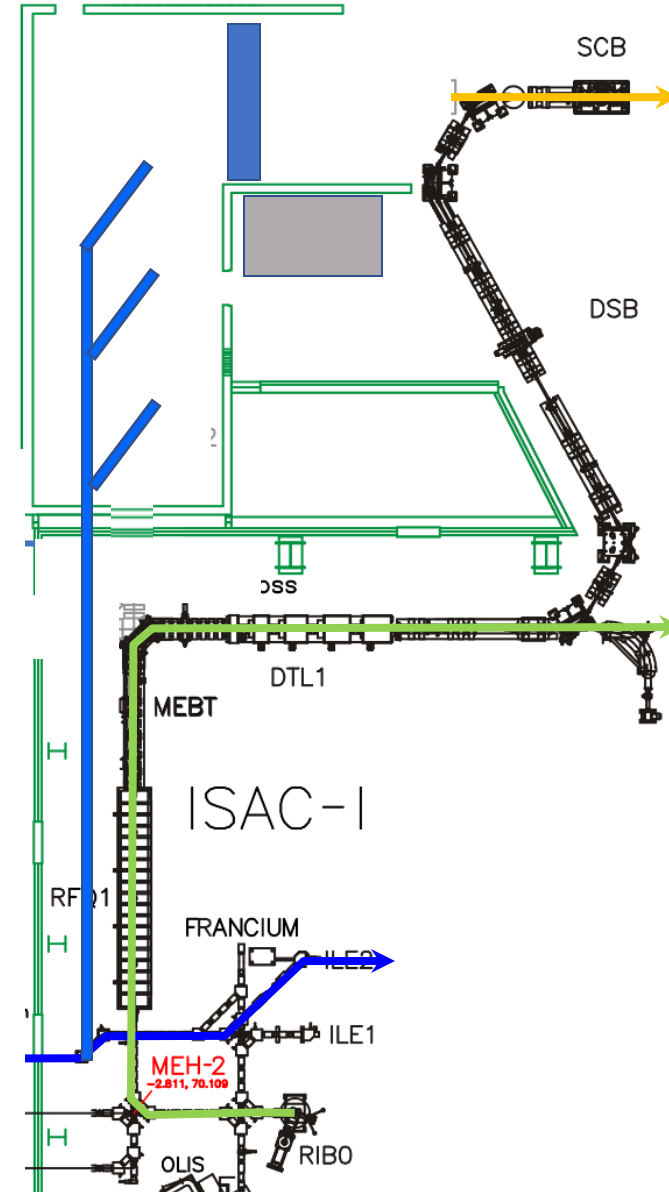
# TRIUMF Experimental needs



- Increased footprint for POLARIS
- Need space for New Fundamental Science experiments
- Future development of Storage Ring
- Does it fit into the existing experimental hall?

# ISAC-III second accelerator path

- Assume that the accelerator leg is not realized in the next 10 years...
- Opportunity to use accelerator fault as experimental hall
- Perhaps for LE expansion:
  - Fundamental Science experiments
  - Turn into Very Low Energy beam line: using a multi-purpose cooler and buncher?
- Other ideas?



**Thank you!**