

Hardware Updates for ALPHA-g Magnet Control System

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1st UM Talk

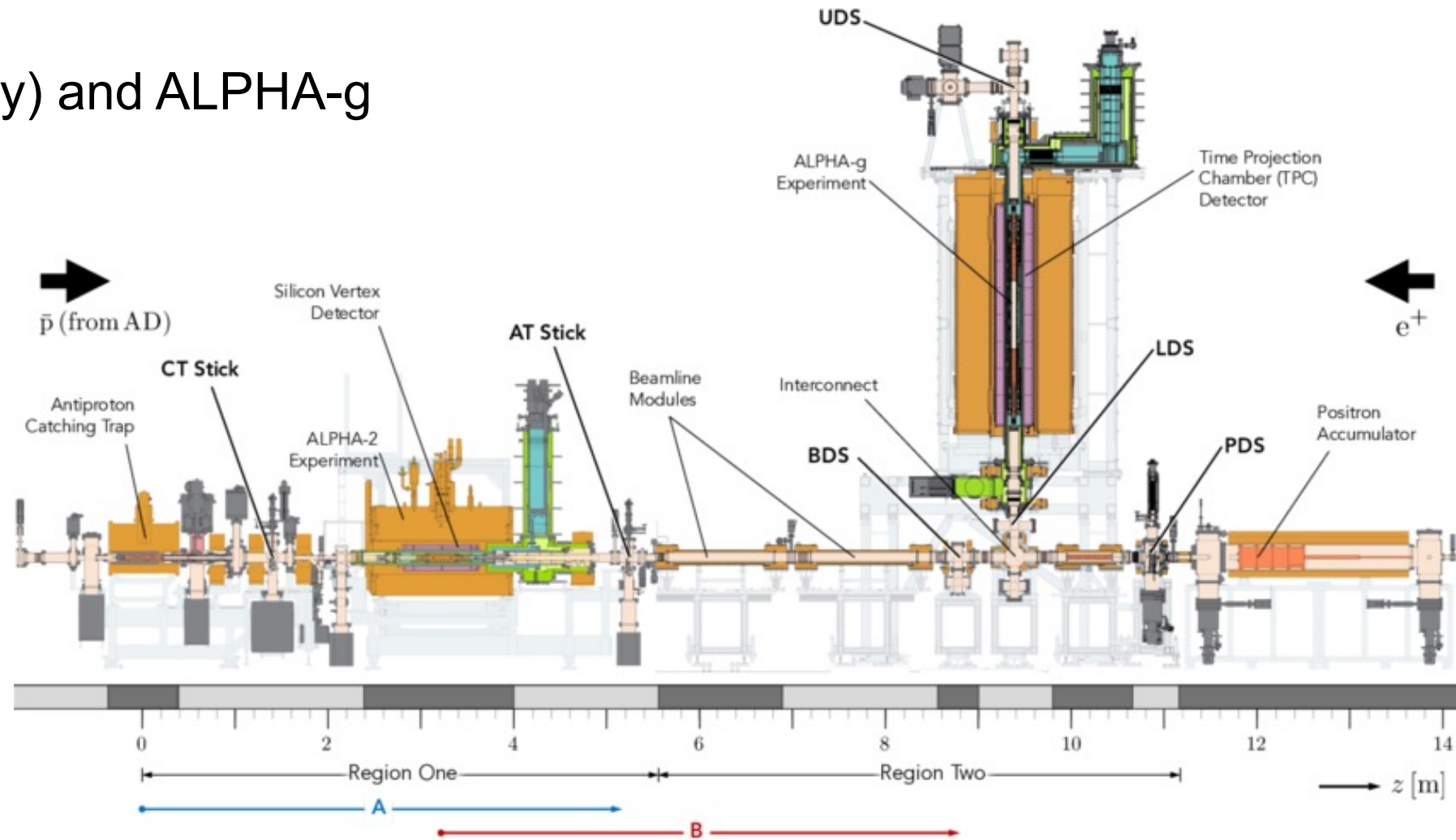
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ALPHA Apparatus

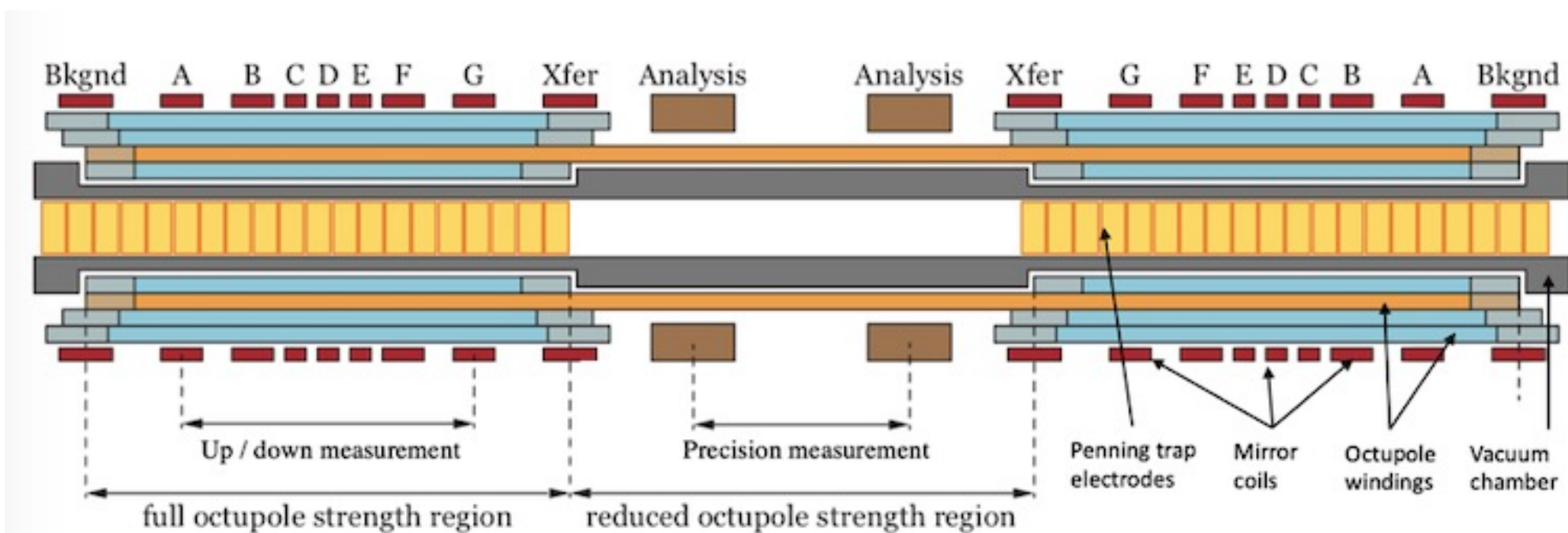
Figure from C.J. Baker et al., *Design and Performance of A Novel Low Energy Multi-Species Beamline for the ALPHA Antihydrogen Experiment*

- ALPHA-2 (spectroscopy) and ALPHA-g (gravitational studies)
- My Supervisors:
 - William Bertsche (Prof at U. Manchester)
 - Jaspal Singh (PhD student at U. Manchester)



Magnet Control System and Quench Protection

- ALPHA-g will have one high precision magnet (center magnet)
- Risks of quenching
- **Project:** Quench Protection System (QPS) upgrades
 - Design and build circuits to improve communication between QPS and computers



From C. Rasmussen,
Do opposites attract?
ALPHA-g prepares to explore antimatter gravity

Exploring



St. Peter's
Cathedral!



Water
Fountain!

Hiking!



Bern!

