Decay Ring Diagnostics

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What is the Issue?

- Diagnostics group specified beam diagnostics in ISS detector report
- Affect the storage ring design
 - Place requirements on the hardware (magnets)
 - Affect the beam
- Do we really need this hardware?

Polarimeter

- Can get beam polarization and energy spread from decay electron polarization
- Problem: need holes in the magnets!
 - Could be done with open-midplane?



First magnet after straight section

Cherenkov for Beam Divergence

- Need to know flux at far detector
- Near detector too close for high accuracy
- Measure with gas Cherenkov
- Problem: Cherenkov increases emittance
 - Windows not yet in computation
- Do we need Cherenkov?
 - Physics WG: 1% flux uncertainty OK
 - Could have second detector at around 1 km