Purpose of the meeting

- ISIS interested FFA option for high energy/power upgrade
  - About 50 % of electricity usage of ISIS is pulsed magnets
  - About 50 % of electricity usage of ISIS is RF cavities
  - Potential $$ savings *if* we can reduce magnet wall-plug power
  - More versatile operation
    - No rep rate limit from magnet power supply
- But
  - Other options available – synchrotron, linac/AR
  - No clear understanding of real capital and operating cost
  - Technically challenging
  - **Prototype FFA required**
  - Can we proceed with ISIS2 without checking FFA option?

Purpose of the meeting

- Motivation for prototype:
  - Answer technical questions about performance and cost of FFA option
  - Develop capabilities
    - Technical skills
    - Non-technical skills

Purpose of the meeting

- LhARA seeks to install FFA “booster” as phase 2 of project
  - Many parameters different to ISIS2 FFA prototype
- Either we cooperate, or STFC will force us to

Purpose of the meeting

- To what extent can we share project (design or hardware)?
  - Main magnet
  - RF
  - Diagnostics
  - Kickers/Septa/Bumpers
  - Codes/design tools
  - Ring design
  - Operation
- Can we increase the cross-talk by scope/specification changes?
  - Without ruining the projects
  - To what extent is it beneficial to change things
- Go through the project and look at scope/technical overlaps