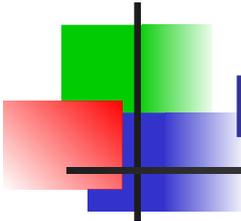


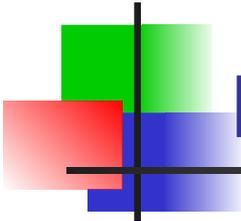
Purpose of the meeting

- 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?



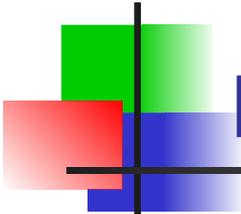
Purpose of the meeting

- 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