

Latest EMMA Status, as Best as I can Recall

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Basic Parameters

- Lattice is 10–20 MeV kinetic energy
- 42 cells linear non-scaling FFAG, doublet
- 14 cavities, 1.3 GHz
- Using displaced quadrupoles to generate combined function
- Will be able to try different configurations
 - ◆ Vary current in coils
 - ◆ Displace magnets

Funding

- Passed first proposal round
- Final decision real soon now
- Also funding for medical FFAG research (PAMELA)

What will it do?

- Test longitudinal dynamics in linear non-scaling FFAGs
- Study transverse dynamics: multiple resonance crossing
- Will vary lattice parameters to verify that it behaves as expected
- Can vary RF gradients as well
- Will introduce errors and determine effect on dynamic aperture