

WG 2 subjects

Items

- Proton driver (ex. For NuFact)
- Proton(hadron) accelerator (ex ELIT)
- Electron accelerator (ex.SBIR)

High energy proton driver (high energy physics)

(1) For Super beam

AGS :28GeV(40GeV) ,2.5Hz(5Hz),1~4MW

FNAL:8GeV,10Hz,10Hz (SCL)

CERN:5GeV,4MW,50Hz(SCL)

KEK : 30GeV

(2) For neutrino factory(ISS)

5~12GeV , 50Hz, 4MW (FFAG)

(3) For muon collider

similar to (2) ??

Low energy proton driver

(Nuclear physics, material science etc.)

for multiple applications for neutron source, energy production, tritium production, nuclear waste etc.

1~3GeV, ~10MW, 1kHz(CW)

* Beam current only matters (beam structure does not matter)

Proton Accelerator

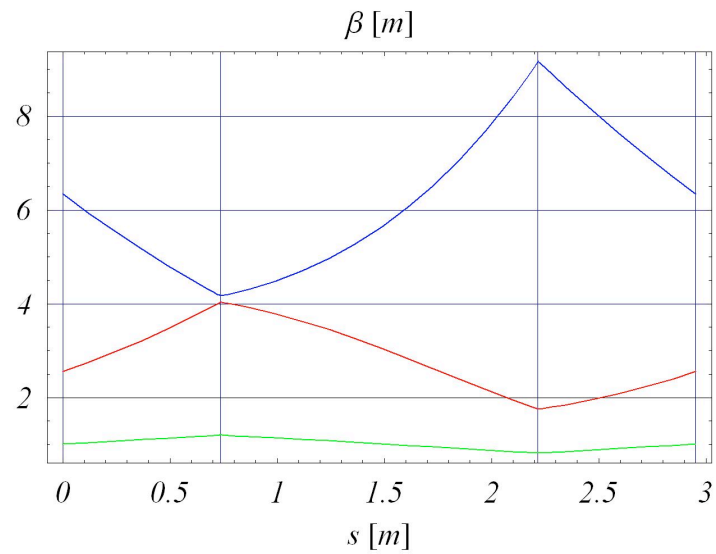
- Medical Accelerator
 - (1) Proton therapy (100~300MeV)
 - (2) BNCT (~10MeV)
 - (3) Scanner (few MeV)

Items to be studied

- (1) Type of FFAG:Scaling or Non-Scaling ?
Spiral or Radial ? (scaling)
- (2)

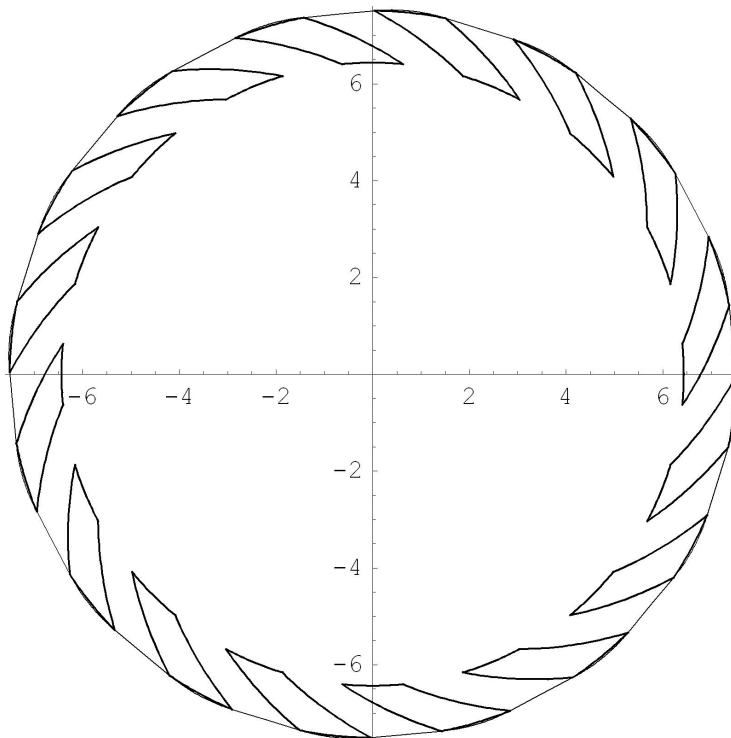
Proton spiral FFAG

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Parameters:

- k 6.3
- spiral angle 62 degree
- E_{\max} 1 GeV
- E_{\min} 150 MeV
- R_{\max} 7.5 m
- R_{\min} 6.43 m
- (Q_x, Q_y) (2.82, 1.28)
- B_{\max} 1.5 T
- Packing factor 0.5



Program

11/7	C.Prior	ISS, NuFact06
	D.Neuffer	FNAL proton driver
	T.Yokoi	
	