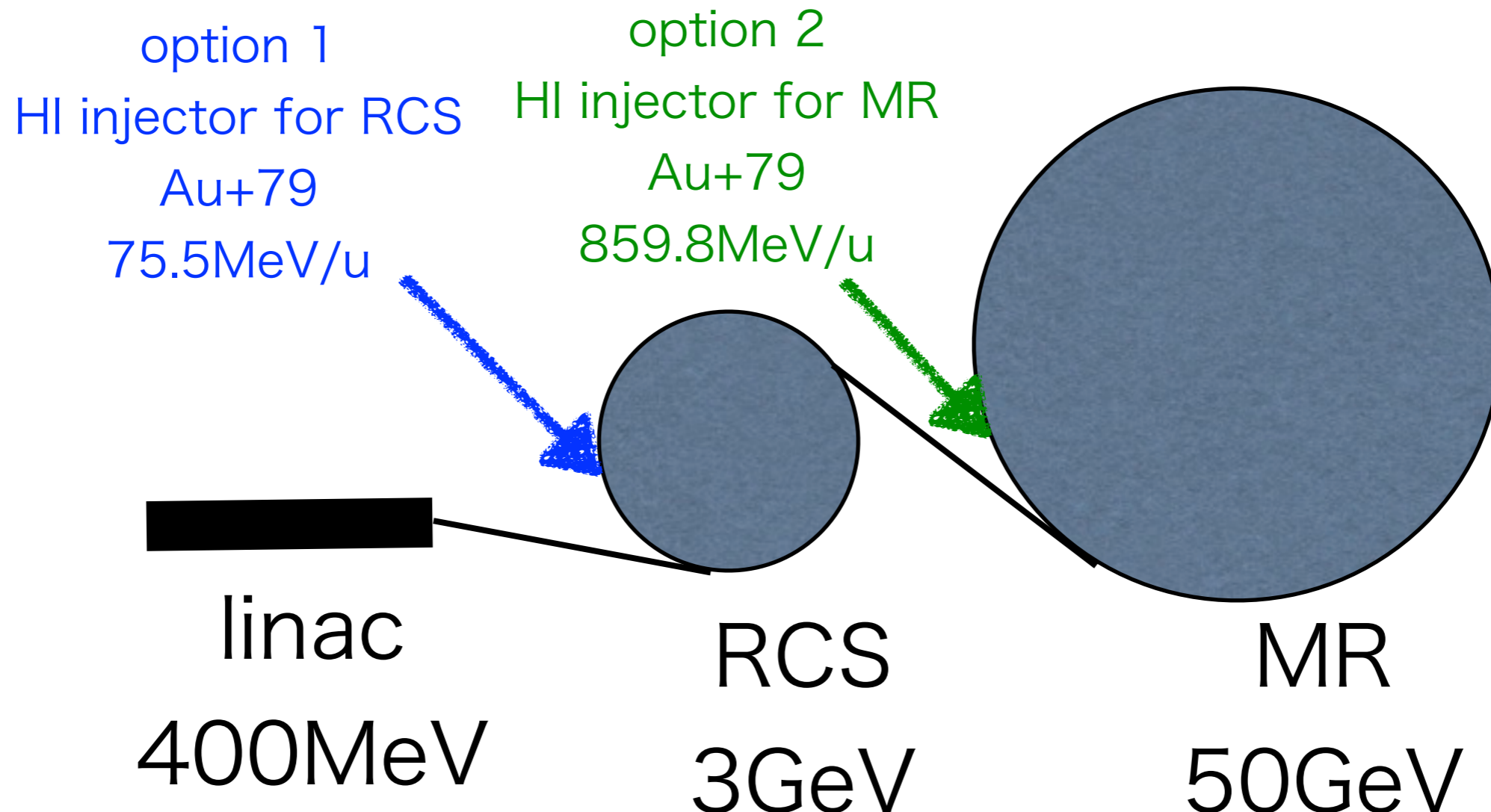


# FFAG HI accelerator for j-parc

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# j-parc complex

- option 1 HI injector for RCS
- option 2 HI injector for MR



# Constraints

- **Minimum disturbance to MLF(RCS) & PNF(MR) experiments**
  - Same magnetic rigidity
    - RCS(3.61Tm), MR(13.6Tm)
    - $\text{Au}^{+79}$  :  $E=75.5\text{MeV/u}$  @RCS injection
    - $\text{Au}^{+79}$  :  $E=859.8\text{MeV/u}$  @MR injection
- **HI injector + stripper**
  - $E = 1.3\text{MeV/u} - 75.5\text{MeV/u}$
  - $Q/m \sim 1/6$  ( $Q=+32$ )
  - Total RF voltage  $>500\text{MV}$
- **Linac (in case)**
  - Length  $>250\text{m}$  ( $E\sim 2\text{MV/m}$ )

Most probable charge state (C stripper)

