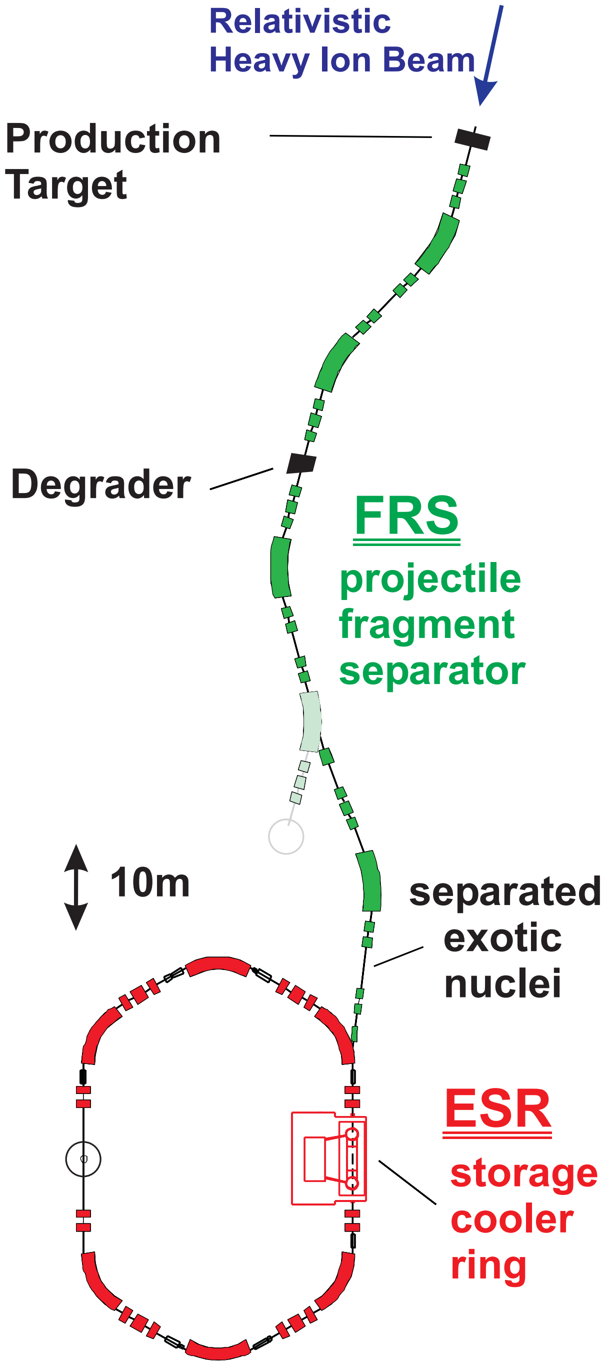
Experiments with Exotic Nuclear Beams: Production, Separation, Storage, Cooling



- Production
  - Primary beams: d to U, 100...1000 MeV/u
  - Projectile fragmentation, ED
  - Yields: 10^5/sec. . . . 1/day
  - Charge states: bare, H-, He-, Li-like
- Separation
  - $B\rho$ Magnetic rigidity analysis
  - $B\rho - \Delta E - B\rho$
- Storage
  - fast injection (400 ns)
  - storage times: min. . . . weeks
- Cooling
  - stochastic pre-cooling
  - electron cooling ($\delta p/p \geq 10^{-6}$)