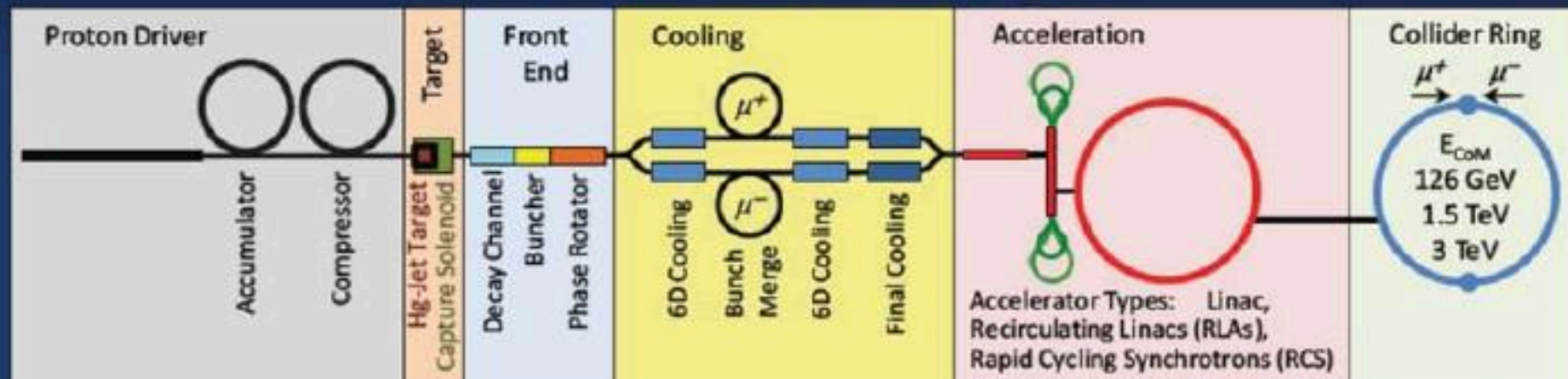


Muon Collider Concept



Muon Collider Block Diagram



Proton source:
For example PROJECT X
at 4 MW, with 2 ± 1 ns long
bunches

Goal:
Produce a high intensity
m beam whose 6D phase
space is reduced by a
factor of $\sim 10^6$ - 10^7 from its
value at the production
target

Collider: $\sqrt{s} = 3$ TeV
Circumference 4.5km
 $L = 3 \times 10^{34} \text{ cm}^{-2} \text{ s}^{-1}$
 $m/\text{bunch} = 2 \times 10^{12}$
 $s(p)/p = 0.1\%$
 $e_{\perp N} = 25 \text{ mm}$, $e_{\parallel N} = 72 \text{ mm}$
 $b^* = 5 \text{ mm}$
Rep. Rate = 12 Hz