

3 GeV proton beam (333  $\mu$ A)

Graphite/SiC target

Surface muons  
(28 MeV/c,  $3e8/s$ )

Muonium production  
(300 K  $\sim$  25 meV  $\sim$  2.3 keV/cm)

340 keV

4 MeV

42 MeV

212 MeV

Silicon strip tracker

$\mu$  orbit

Disk loaded

3 T magnetic field  
(1 ppm uniformity)

Surface muon

Ultra cold  $\mu^+$  source

Muon LINAC (300 MeV/c)

Laser  
122nm, 355nm

Ultra-cold  
 $\mu^+$

Surface muons

Mu production  
target

