… from feed back received so far …

(U$^{4/28/28+}$) if not stated explicitly

1: UNILAC exit
I = 4.3 emA
$\varepsilon_{x/y}$ = 0.15/0.16 µm
$B_{x/y}$ = 29/27 emA/µm
July 21st, 2016

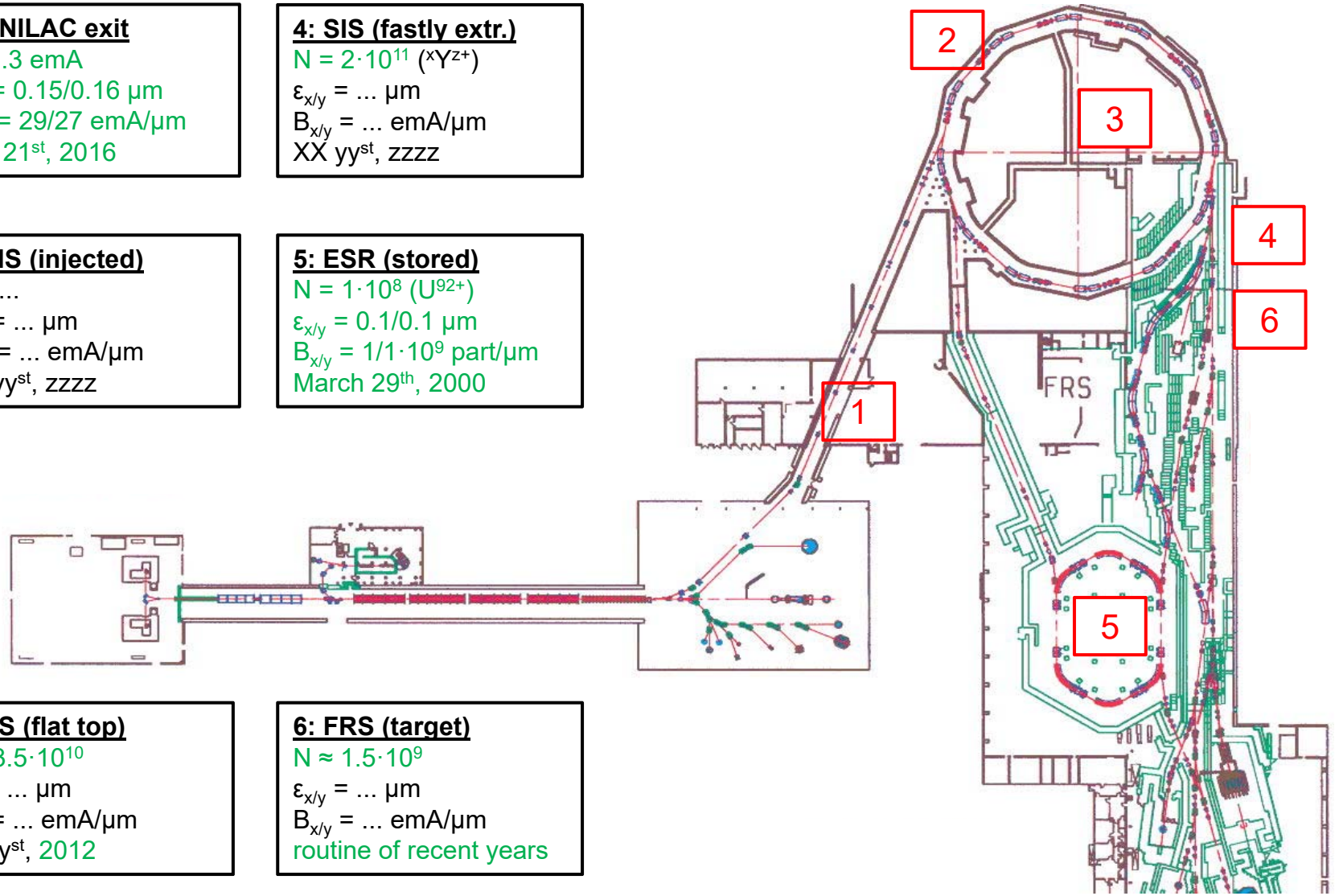
2: SIS (injected)
N = ...
$\varepsilon_{x/y}$ = ... µm
$B_{x/y}$ = ... emA/µm
XX yyst, zzzz

3: SIS (flat top)
N = 3.5·10^{10}
$\varepsilon_{x/y}$ = ... µm
$B_{x/y}$ = ... emA/µm
XX yyst, 2012

4: SIS (fastly extr.)
N = 2·10^{11} ($^{x}Y^{z+}$)
$\varepsilon_{x/y}$ = ... µm
$B_{x/y}$ = ... emA/µm
XX yyst, zzzz

5: ESR (stored)
N = 1·10^{8} (U^{92+})
$\varepsilon_{x/y}$ = 0.1/0.1 µm
$B_{x/y}$ = 1/1·10^{9} part/µm
March 29th, 2000

6: FRS (target)
N ≈ 1.5·10^{9}
$\varepsilon_{x/y}$ = ... µm
$B_{x/y}$ = ... emA/µm
routine of recent years



… UNILAC details …

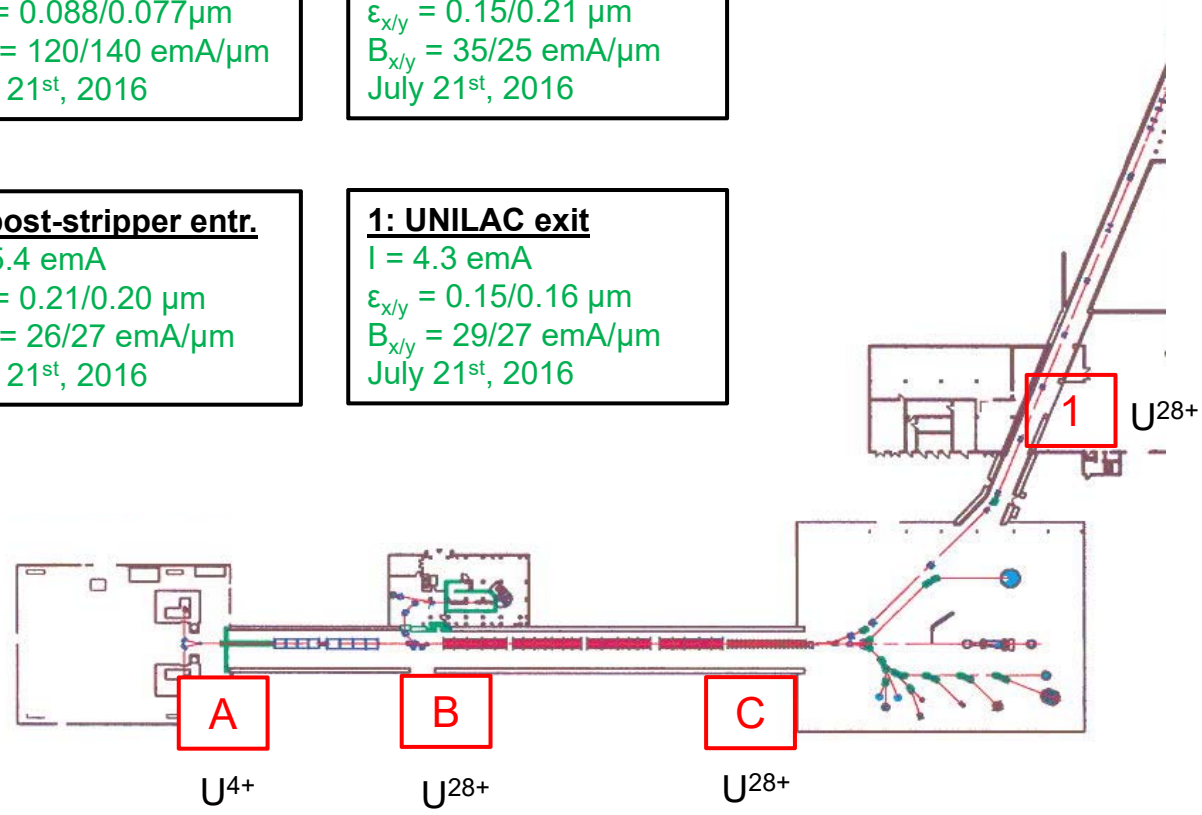
$U^{4/28/28+}$

A: LEBT exit
I = 11 emA
$\varepsilon_{x/y}$ = 0.088/0.077µm
$B_{x/y}$ = 120/140 emA/µm
July 21st, 2016

C: post-stripper exit
I = 5.1 emA
$\varepsilon_{x/y}$ = 0.15/0.21 µm
$B_{x/y}$ = 35/25 emA/µm
July 21st, 2016

B: post-stripper entr.
I = 5.4 emA
$\varepsilon_{x/y}$ = 0.21/0.20 µm
$B_{x/y}$ = 26/27 emA/µm
July 21st, 2016

1: UNILAC exit
I = 4.3 emA
$\varepsilon_{x/y}$ = 0.15/0.16 µm
$B_{x/y}$ = 29/27 emA/µm
July 21st, 2016



- optimized performance with most complete set of consistent parameters
- higher currents have been temporarily measured w/o corresponding emittance measurements

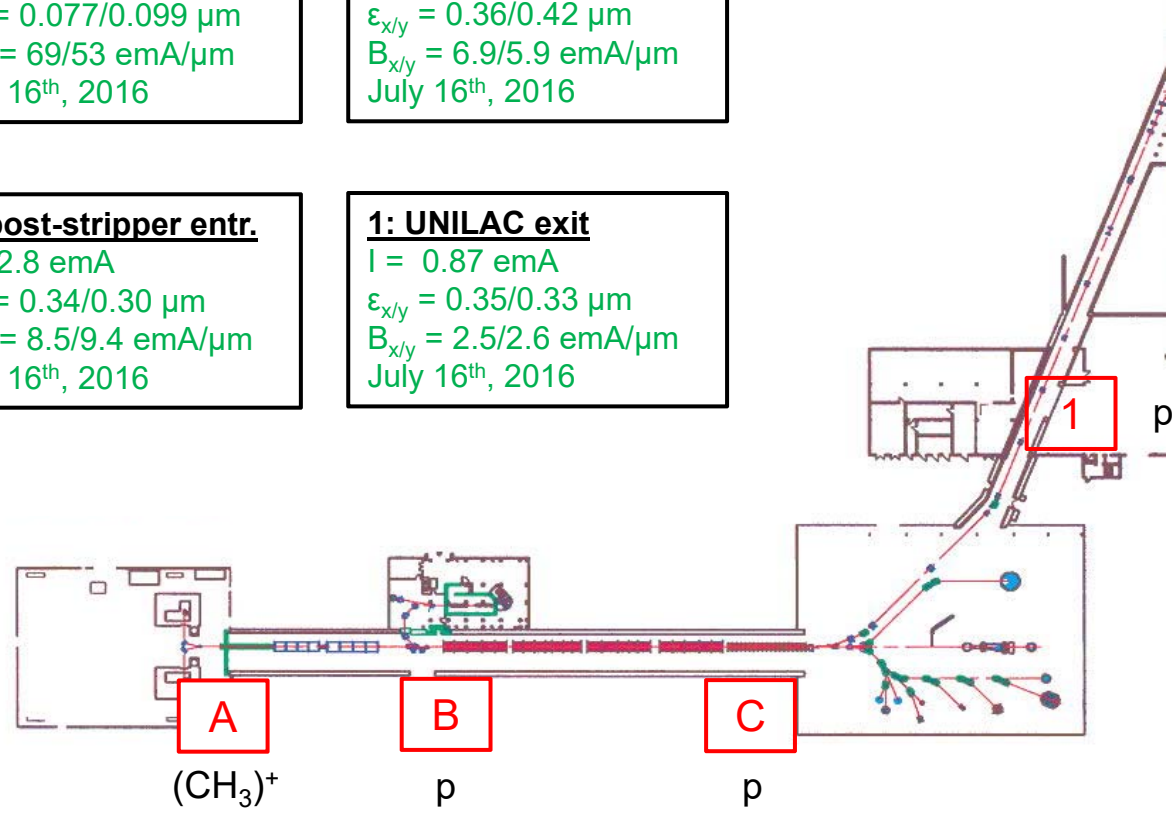
… UNILAC details …
Proton Operation 2016 (5.9 MeV)

A: LEBT exit
I = 5.3 emA
$\varepsilon_{x/y}$ = 0.077/0.099 µm
$B_{x/y}$ = 69/53 emA/µm
July 16th, 2016

C: post-stripper exit
I = 2.5 emA
$\varepsilon_{x/y}$ = 0.36/0.42 µm
$B_{x/y}$ = 6.9/5.9 emA/µm
July 16th, 2016

B: post-stripper entr.
I = 2.8 emA
$\varepsilon_{x/y}$ = 0.34/0.30 µm
$B_{x/y}$ = 8.5/9.4 emA/µm
July 16th, 2016

1: UNILAC exit
I = 0.87 emA
$\varepsilon_{x/y}$ = 0.35/0.33 µm
$B_{x/y}$ = 2.5/2.6 emA/µm
July 16th, 2016



- optimized performance with most complete set of consistent parameters
- higher currents have been temporarily measured w/o corresponding emittance measurements

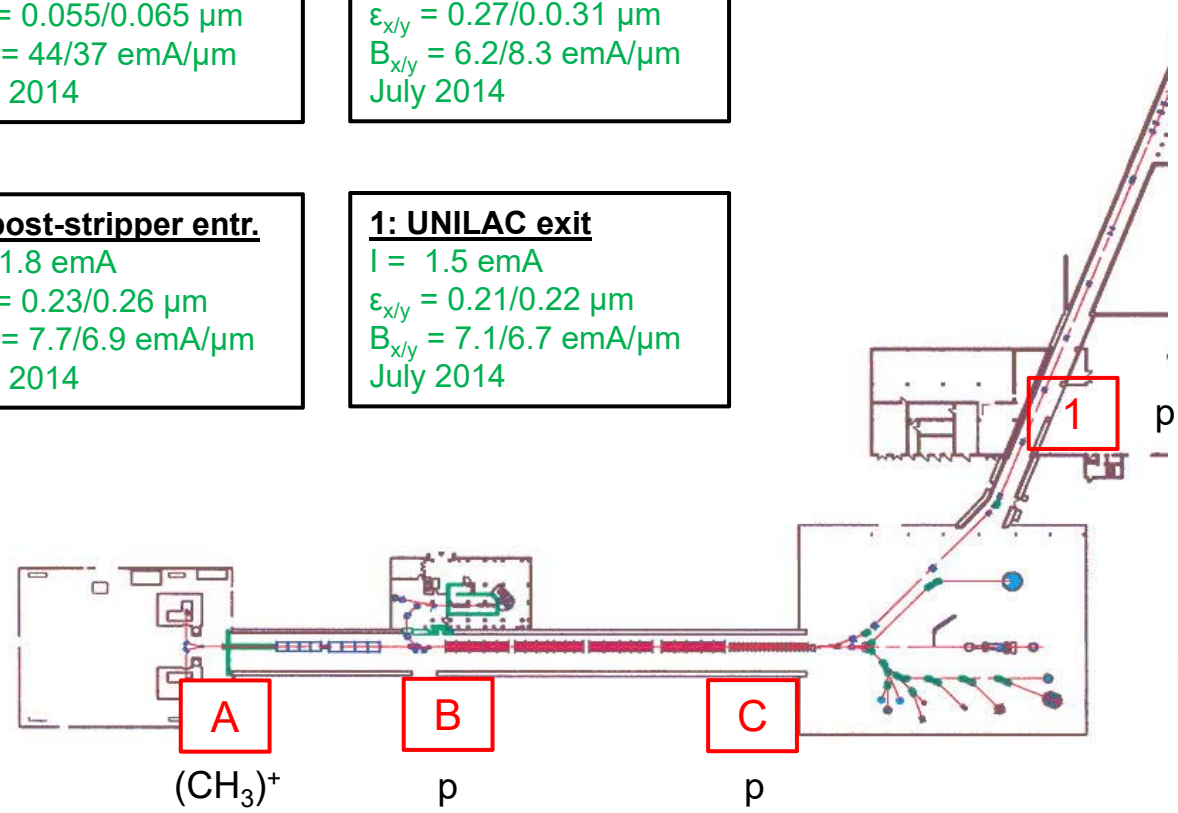
… UNILAC details …
Proton Operation 2014 (11.4 MeV)

A: LEBT exit
I = 2.4 emA
$\varepsilon_{x/y}$ = 0.055/0.065 µm
$B_{x/y}$ = 44/37 emA/µm
July 2014

C: post-stripper exit
I = 1.7 emA
$\varepsilon_{x/y}$ = 0.27/0.0.31 µm
$B_{x/y}$ = 6.2/8.3 emA/µm
July 2014

B: post-stripper entr.
I = 1.8 emA
$\varepsilon_{x/y}$ = 0.23/0.26 µm
$B_{x/y}$ = 7.7/6.9 emA/µm
July 2014

1: UNILAC exit
I = 1.5 emA
$\varepsilon_{x/y}$ = 0.21/0.22 µm
$B_{x/y}$ = 7.1/6.7 emA/µm
July 2014



PRSTAB 18 050102 (2015)

- optimized performance with most complete set of consistent parameters
- higher currents have been temporarily measured w/o corresponding emittance measurements