

Motivation

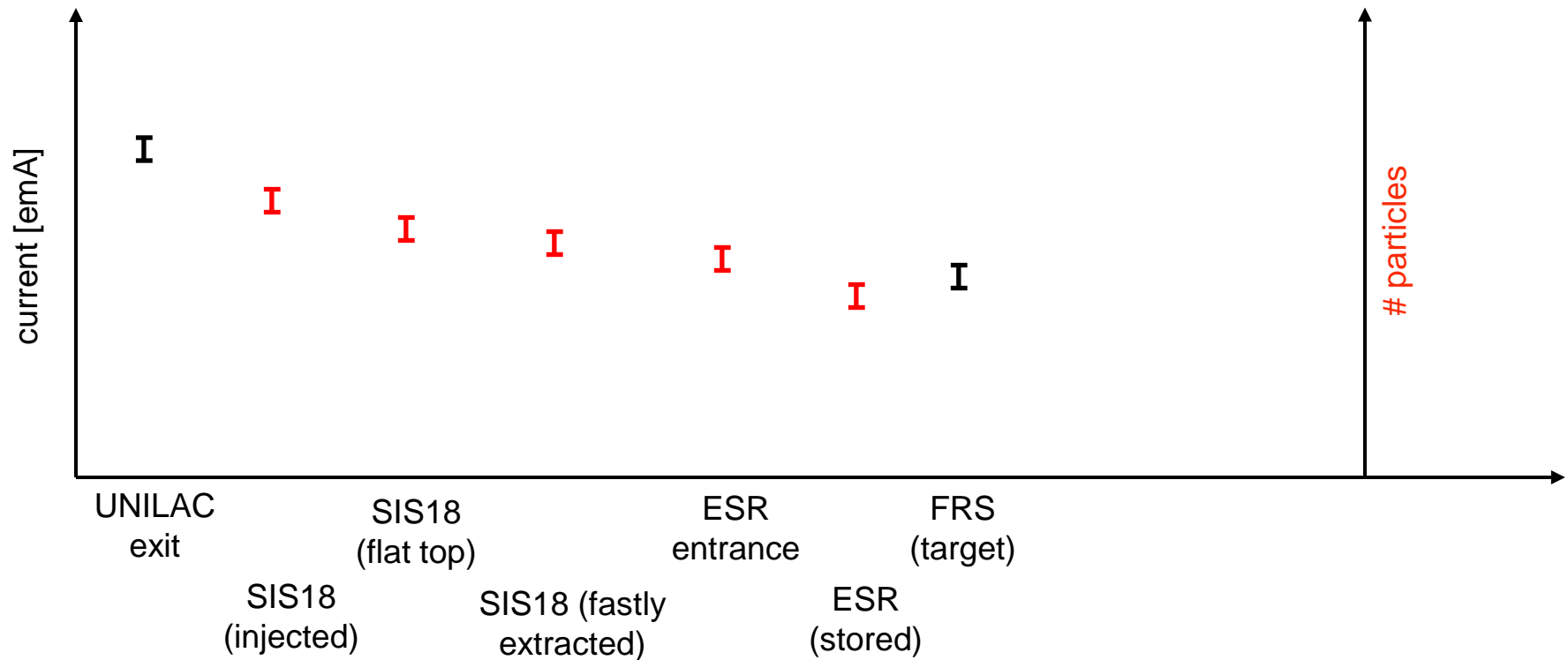
- GSI shall report the status on what has been really achieved at existing facilities w.r.t. beam parameters
- essential content of measured-parameters list: what parameter, where, when
→ parameter, nomenclature of device, date & time
- preferred: data that was stored in and is retrievable from log files (transmissions, emittances, profiles, ...), i.e., location- and time-stamped data files available from CS

Data collection

- AccOp head asked LG to inquire these data from the MKs
- Template table has been agreed and sent out
- Query is initially restricted to data related to uranium FAIR reference, i.e., :
 - source: $^{238}\text{U}^{4+}$
 - post-stripper: 28+
 - SIS18: 28+
 - ESR: whatever

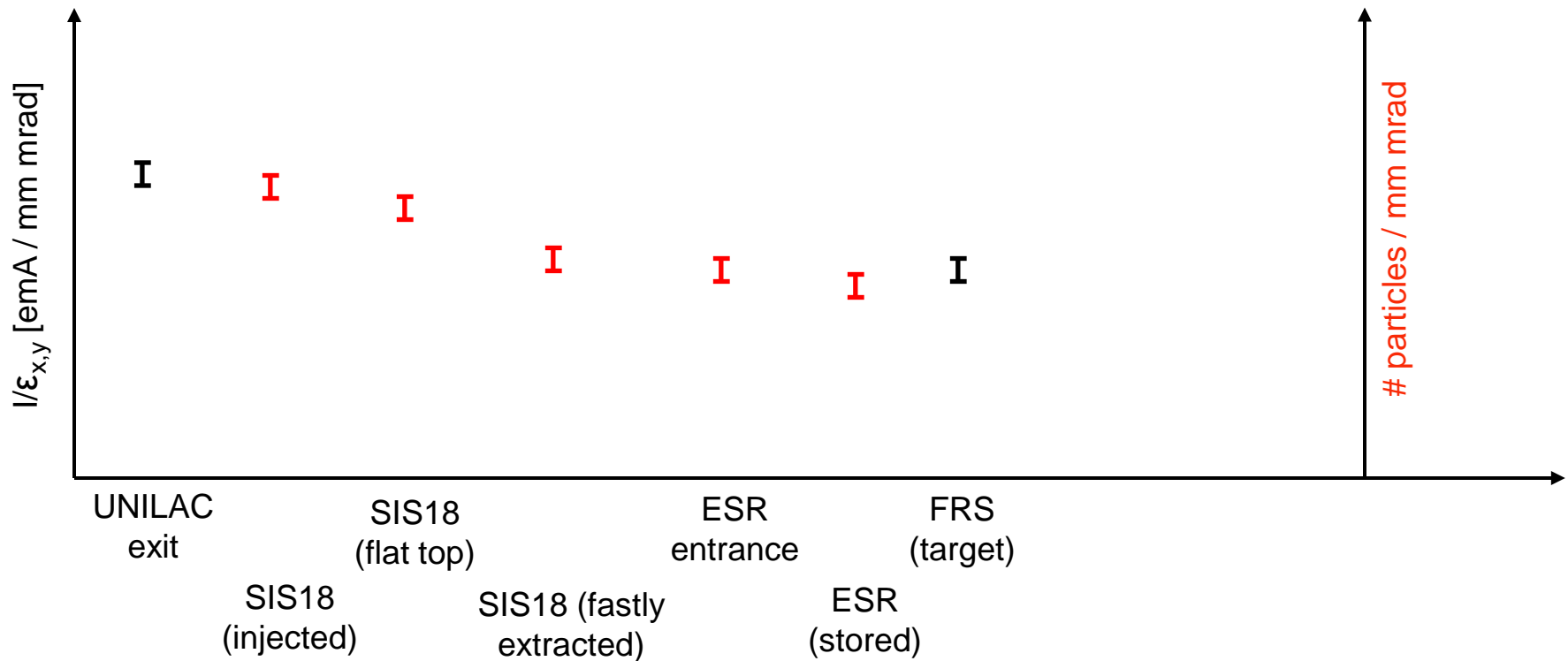
Goal

GSI shall provide figures on measured intensities ...



Goal

... and achieved brilliances (intensity per emittance)



GSI shall deliver ...

1 UNILAC exit

$I = 4.3 \text{ emA}$

$\epsilon_{x/y} = 0.15/0.16 \text{ } \mu\text{m}$

$B_{x/y} = 29/27 \text{ emA}/\mu\text{m}$

July 21st, 2016, 02:00

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2 SIS (injected)

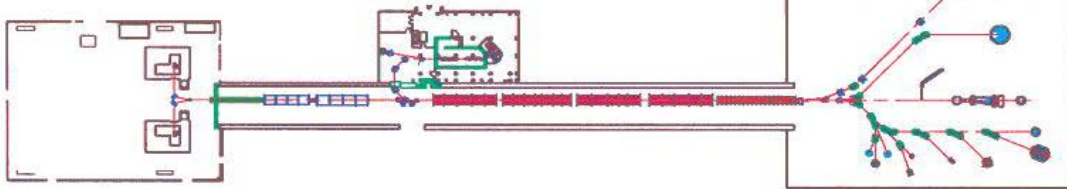
$N = \dots$

$\epsilon_{x/y} = \dots \text{ } \mu\text{m}$

$B_{x/y} = \dots \text{ emA}/\mu\text{m}$

XX yyst, 20xx, ab:cd

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6 ESR (stored)

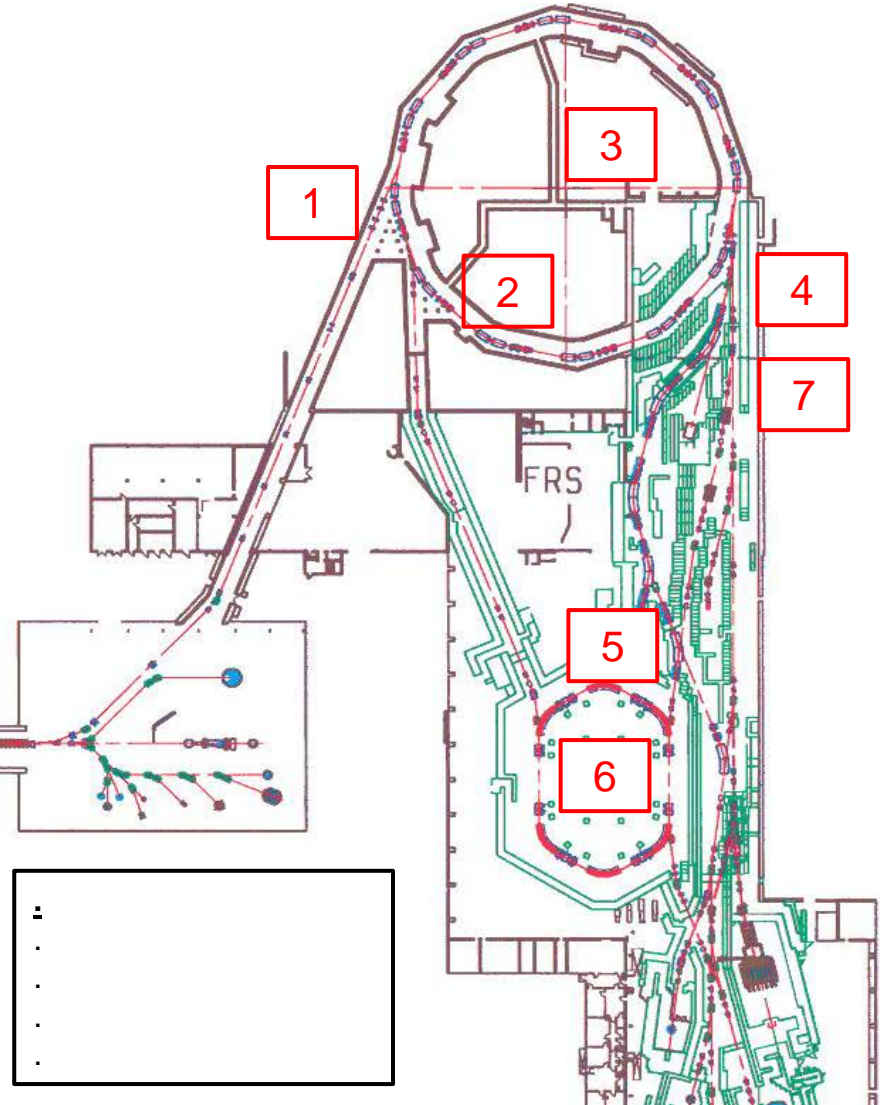
$N = \dots$

$\epsilon_{x/y} = \dots \text{ } \mu\text{m}$

$B_{x/y} = \dots \text{ emA}/\mu\text{m}$

XX yyst, 20xx, ab:cd

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Template sent to MKs last week

- template has been sent out to MKs
- contains more parameters (as many are needed for internal use)
- just key parameters reported to GF

	A	B	C	D	E	F	G	H
		Energy [MeV/u]	Intensity	norm. hor. rms-emit	norm. ver. rms-emit	rms-bunch length	ref. rms-mom. spread [%]	
			lines → current [emA] rings → # particles					
Location (rough)								
Location (Nomenclature)								
datetime of record								
raw data stored g/n								
post-stripper exit		5.9(1)	5.1(5)	0.15(1)	0.21(2)	not meas.	not meas.	
Location (Nomenclature)		A4DP4X-TIDP0X	UA4DE4...	x	y			
datetime of record		20160721 00:07	20160721 03:...	03:23	19:36			
raw data stored g/n		n	y	y	y			
UNILAC exit		5.9(1)	4.2(4)	0.15(1)	0.16(2)	not meas.	not meas.	
Location (Nomenclature)			TK9DE4...	x	y			
datetime of record			20160721 03:...	34:30	44:10			
raw data stored g/n		n	y	y	y			
SIS 18 (injected)								
Location (Nomenclature)								
datetime of record								
raw data stored g/n								
SIS18 (flat top)								
Location (Nomenclature)								
datetime of record								
raw data stored g/n								
SIS18 (fastly extracted)								
Location (Nomenclature)								
datetime of record								
raw data stored g/n								
ESR entrance								
Location (Nomenclature)								
datetime of record								
raw data stored g/n								
ESR (stored)								
Location (Nomenclature)								
datetime of record								
raw data stored g/n								
FRS target								
Location (Nomenclature)								
datetime of record								
raw data stored g/n								

