Capture Simulation Update

Alessandro Vivoli, Robert Chehab, Alessandro Variola

Type	N. e^+	ε_x π mm mrad	ε_y π mm mrad	ε_z π cm MeV	σ_z cm	σ_E MeV	σ_x cm	σ_y cm
1.8 / 5 182 MeV	$6.85\ 10^7$	20	15	2.66	0.53	5.16	0.48	0.39
1.8 / 5 184 MeV	$6.83\ 10^7$	19	16	2.62	0.89	2.94	0.69	1.03

Type	N. e^+	ε_x π mm mrad	ε_y π mm mrad	ε_z π cm MeV	σ_z cm	σ_E MeV	σ_x cm	σ_y cm
1.8 / 5 4.996 GeV	$6.24\ 10^7$	1.16	0.96	30.96	0.49	63.75	0.74	0.70

To reduce the energy spread

- Change of the phases in the accelerating cavities.
- Employment of a shorter beam at the beginning of the LINAC.
- Insertion of an energy compressor at 5 GeV.