

Simulation for exchanged shb3 and pb					
<i>energy cut after 2nd accelerating structure at 17 MeV</i>					
sub harmonic bunchers (7.5A gun current needed for reasonable current after injector!!!)					
energy [MeV]	rms bunch length	$\epsilon_{x,n,rms}$ [μrad]	$\epsilon_{y,n,rms}$ [μrad]	main bunch	satellit
17.7±0.2	15.2°	$32 \cdot \pi$ ¹⁾	$32 \cdot \pi$ ¹⁾	3.6 A (48 %)	3.0%
		$30 \cdot \pi$ ²⁾	$28 \cdot \pi$ ²⁾		
3 GHz operation (5.5A gun current)					
energy [MeV]	rms bunch length	$\epsilon_{x,n,rms}$ [μrad]	$\epsilon_{y,n,rms}$ [μrad]	main bunch	
17.6±0.2	12.4°	$14 \cdot \pi$ ¹⁾	$14 \cdot \pi$ ¹⁾	3.8 A (69 %)	
		$10 \cdot \pi$ ²⁾	$11 \cdot \pi$ ²⁾		
1) all particles, result from Parmela					
2) single bunch, energy > 17 MeV					