

Table: revised: Comparison of 3 simulations (20071220)
 (The values of some parameters are still Need-To-Be-Comfermed)

- (a) Vivoli-san 1 : Vovoli-san's presentation in Posipol 2007
 "A_Positron_Capture_for_the_Compton_Scheme.ppt"
- (b) Vivoli-san 2 : Vovoli-san's recent report
 "RESULTS OF PARMELA SIMULATIONS OF THE CAPTURE SECTION WITH PHOTONS FROM 10 LASER CAVITIES"
- (c) Wanming-san : Wanming-san's recent report
 "Capture under different target and Pz lower cut.ppt"

	Vivoli-san 1	Vivoli-san 2	Wanming-san
Ne+(captured)/Ng [%] (no cut)	~2	0.77	~0.5
Number of collision points	1	10	10
Distance from CP to target [m]	10	40	40
Peak acc. gradient [MV/m]	~15 (*1)	7 (*2)	~15 (*3)
Average acc. gradient [MV/m]	7 (*1)	~3.3 (*2)	7 (*3)
Iris diameter of Acc. [mm]	46 (*1)	40 (*2)	60 (*3)
Distance from target to AMD [m]	0	0	0.5 ???
AMD (OMD) length [m]	0.5	0.5	0.5
AMD (OMD) field [T]	6-0.5	6-0.5	5-0.25
target thickness [X0]	0.4	0.4	0.5 (*4)
phase window [deg]	+25 (*5)	+25 (*5)	+7.5 (*5)

(*1) In "Vivoli-san 1", he did not assume particular scheme.
 He just assumed Compton.

(*2) In "Vivoli-san 2", he assumed the ERL scheme.
 This scheme requires 100 m sec pulse length of RF acceleration.

(*3) In "Wanming-san", he used the code which was developed for
 the undulator with minimum modifications for the Compton.

(*4) When t=0.5, Ne+(captured)/Ng = ~ 0.5% was obtained with no cut.

(*5) All values are "edge" and "before compression".