Prepared by the scientific secretary: R. Wasef

I.Hofmann talk:

S.Gilardoni:	the halo cleaning is being already done in the PS using the 4qy=1 + coupling. It has to be studied more quantitatively.
C. Chen:	How do you cut the halo in the simulation, is it a simple collimator in one plane?
	-> Yes, but there are many scrapers in the transverse direction to
	clean the halo in the phase space.

M.Fitterer talk:

- S.Machida: This study is very similar to the one done for J-parc. The most important point is to carefully choose your working point.
- G.Franchetti: How do you compute dispersion in presence of space charge? -> The dispersion is the optics one, not the dispersion seen by the beam.

H.Bartosik talk:

F.Schmidt:	Do you know the souce of the tails (measured on wire-scanner)? (S.Gilardoni & H.Bartosik)-> this is most probably due to the matching in transfer lines.
V.Forte:	The processing method of the wire-scanner data is just to take the average of the several measurements? -> No first, one has to combine the data by recentring it and resizing it then fitting
S.Machida:	having a high dispersion is good to reduce the tune spread, but the drawback is the fact of breaking the symmetry and therefore exciting 3 rd order and 4 th order resonances. Are they excited? -> Not yet studied.
E.Metral:	What is the maximum detuning? -> 0.182
E.Metral:	One could see the the effect of such a tune-spread in the PS for the longer time possible (\sim 5s)
G.Franchetti:	 (To S.Machida) due to dispersion, the space charge potential is distorted. → excitation. Simone: What if the lattice is really smooth? The synchrotron motion doesn't it compensate the distorsion due to dispersion Shinji: yes it does.

Q:	How do you compute the tune? ->by taking mini buches around particles.
G.Franchetti:	Why and what is the physics behind resonance overlapping? -> in linac it is space charge itself
A.Lombardini	: can the beam go through with space charge forces ~80% of the focusing ones?
I.Hofmann:	Resonance Overlapping comes from the fact that you consider a rigid Gaussian beam which is not the case of a self-consistent code.
C. Chen:	Resonances are very sensitive to local phase advance, it could be that yours is very high.

Discussion:

- Considering the rise time of the emittance growth, 1 injection batch scheme could be a solution for PS.
- Rings have a much lower space charge than linacs, so no need to change the optics gradually in the ring after injection