Questions for the Super B Factory Workshop

What is the maximum possible luminosity, 10^36/cm^2/sec?

What physics is accesible with only 2 x 10^35, and for which topics is 10^{36} required ? How much of this physics can also be accessed by LHCb?

Searching for Physics Beyond the Standard Model using rare B decays at a super B experiment will require precise predictions for the expected values of the observables within the Standard Model.

- (a) What are the expected model independent uncertainties for the Standard Model predictions of the various observables?
 - -- Which of these predictions are dominated by experimental inputs?
 - -- Which modes and what measurements, by BaBar and Belle in the next few years, could be helpful in improving these predictions?
- (b) What are the ranges of the SM uncertainties based on various models? What experimental inputs and tests could help in validating these models?

For the vertex detector:

Can small striplets cope with the occupancy, or do we need pixels?

Do we need to have better vertex resolution with smaller beam pipe? For what physcs?

For tracking:

Will a gas based tracker work at the expected occupancies/backgrounds?

Should we lower the solenoid filed for better tracking of low pt particle? What physics could be done better?

For the DIRC/PID:

Is it possible to have a compact readout inside the magnetic field?

For the calorimetry:

Will the current CsI(Tl) crystals still be usable at the expected occupancies and integrated backgrounds (radiation damage)? To what extent would a change to pure CsI solve these problems?

Does the background scale with luminosity or just beam current ? .. or both! ... and how do we model it?

What is the maximum possible luminosity, 10^36/cm^2/sec?

What is the limit on beam currents ?

What is the maximum tune shift ?