

session 1 discussion

Questions from the organizers:

- Is the R&D for the cryomodule adequate and feasible within the given timeline?
- Which further CERN input is needed and at which point/level should CERN-RF assume the lead (or major liaison) role?
- Is the phased upgrade plan effective and compatible with LHC requirements?
- Feasible mode(s) of operation with crab cavities (for example control of crossing angle)

can we decide by summer 2009?

- 400, 600 or 800 MHz?
- elliptical or compact?
- 1.9 K or 4.5 K?

800 MHz at 4.5 K not completely excluded

- prototype identical to final cavities?

comments & other questions

- space in Point 4 may not be available
- can LHC continue operation if crab cavities are warm?

comments / questions

- **decouple tests?**
- **test in other hadron colliders?**
 - would it be conclusive? (bunch length, collimation,...)
- **test in AD?!**
 - verification of blow-up prediction
- **what is the purpose of the prototype test?**
 - go/no-go for US construction project
- **benefits of first test must be made clear**
 - emittance growth, collimation, luminosity gain
 - modify conditions to enhance effect

further comments / questions

- must show luminosity gain with intense beam, or at least with nominal bunches
- participation in tests at KEK
- cost of infrastructure