

Dear all,

Please find below a short summary of our discussion in the CCC yesterday, where we decided the next steps in our investigations:

- Investigations / measurements last week have shown that the 5 kHz ripple is present only when in current control (I_loop), and not when in voltage control (V_loop) -> see PPT of Gilles Le Godec and Olivier Michels,
- with external DCCT 200A, the current ripple was reduced by a factor of 4,
- The cause of the ripple current may be an EMC problem, linked to the integration into the power converter of the DCCT or DCCT electronics (e.g. cable screen, ground connection, cable routing inside the converter etc.)
- The CCC-PS operation team proposed to do a test to establish whether a reduction by factor 4 would be sufficient to have a correct beam shape,
- We agreed to prepare 2 converters (WFW and WDW) with external DCCTs 200A for a test possibly end of this week, at 50 A DC current,
- Wednesday 15.4. the LMC will decide on machine operation/test schedule for the next days,
- EPC High Precision Measurement section (Olivier Fournier and Miguel Cerqueira Bastos) will investigate possible causes, and in particular concentrate on EMC issues.

Karsten