

Minutes of KURNS Video Conference meeting 15 October 2020

attendees: Y. Ishi (YI), JB. Lagrange (JB), S. Machida (SM), D. Kelliher (DK),
T. Uesugi (TU), C. Rogers (CR), Emi Yamakawa (EY), Yoshiharu Mori (YM),
Yasutoshi Kuriyama (YK), Chris Wilcox (CW), Alex Pertica (AP),
Max Topp-Mugglestone (MTM)

October 15, 2020

1 KURNS plans (YI)

- ◇ Initial schedule delayed by half a month, but should recover and end commissioning by the end of November. JAEA experiment should take place in December.
- ◇ Wire experiment could happen in March or April.

2 KURNS status (TU)

- ◇ New corrector coil, RF feeder, magnetic shield installed, RF cavity put in the ring, connections done. Interlock system connected but need for test next week.
- ◇ Start of the commissioning in November.
- ◇ test of the RF voltage in the cavity not done, but could be checked with low power.

3 Wire scanner experiment (EY)

- ◇ Simulation study of WSM done with synchrotron motion.
- ◇ Big difference between experiment and simulation, synchrotron motion does not help. differences in turn separation could be the reason.
- ◇ Bias voltage applied on the wire does not seem useful, need to check with experiment.
- ◇ Preparation of the wire experiment for 10um and 30um.
- ◇ YM comment on the bias voltage can be increased 10 times to solve the problem.
- ◇ CW had a question on temperature issue at the frame since melting temperature is much lower than the wire's and if there is a way to monitor the temperature during the experiment. YM thinks that heat will be transferred through radiation so frame should not have any problem.

4 Adiabaticity experiment update (DK)

- ◇ Emittance growth can be observed up to a small adiabaticity parameter (0.02).
- ◇ simulation does not match the experiment, RF noise to be included, and refine the distribution in simulation.

5 AOB

- ◇ Next meeting 15th November 2020.