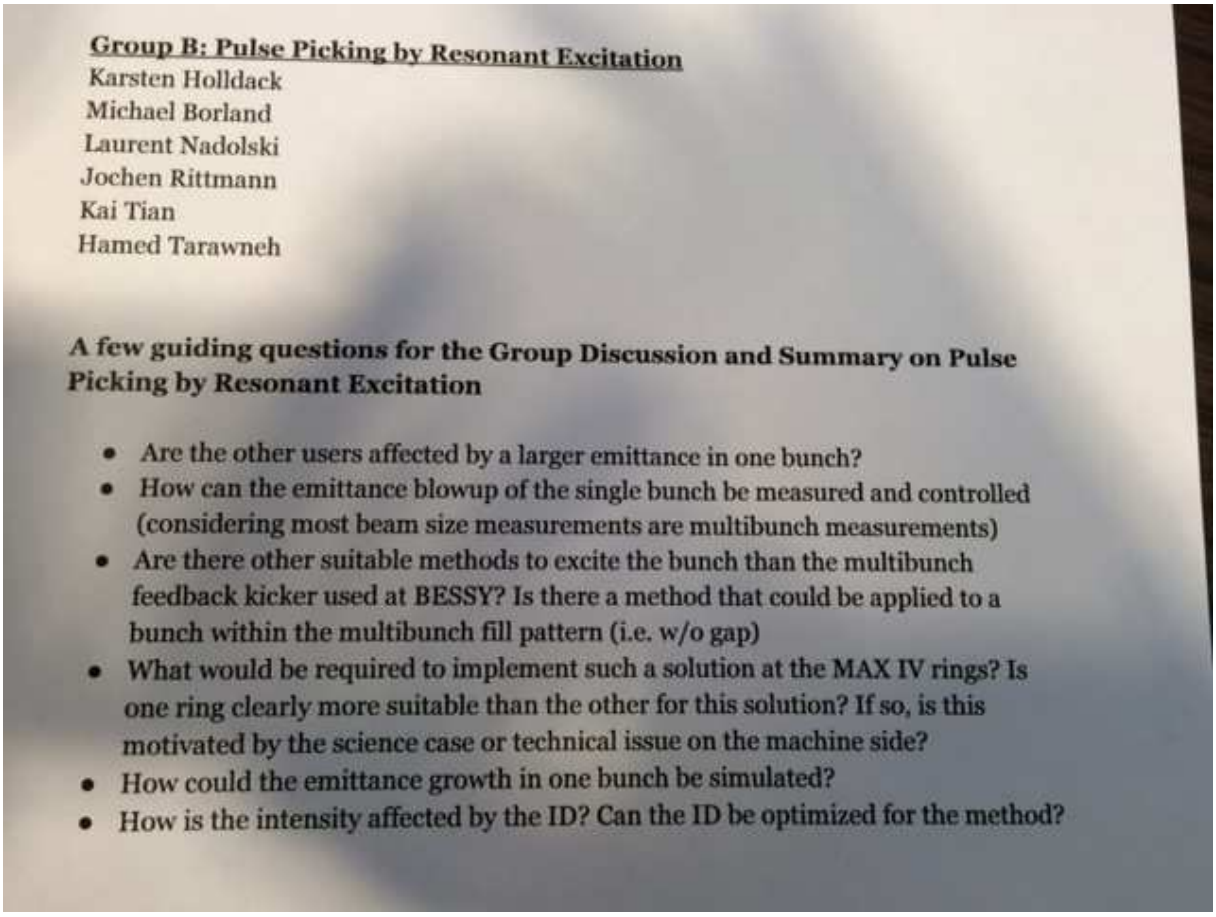

Group B: Pulse Picking by Resonant Excitation

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A few guiding questions for the Group Discussion and Summary on Pulse Picking by Resonant Excitation

- Are the other users affected by a larger emittance in one bunch?
- How can the emittance blowup of the single bunch be measured and controlled (considering most beam size measurements are multibunch measurements)
- Are there other suitable methods to excite the bunch than the multibunch feedback kicker used at BESSY? Is there a method that could be applied to a bunch within the multibunch fill pattern (i.e. w/o gap)
- What would be required to implement such a solution at the MAX IV rings? Is one ring clearly more suitable than the other for this solution? If so, is this motivated by the science case or technical issue on the machine side?
- How could the emittance growth in one bunch be simulated?
- How is the intensity affected by the ID? Can the ID be optimized for the method?

Group B: Answers:

- no complaints yet, small part, depends on detection schemes
- is desired but needs gated imaging or special detection in beamline

-> measured indirectly bei APD in beamline

- it is possible to excite individual bunches also along the MB train,
- stripline kicker is usually available at SR sources
- MAXIV: maybe 3 GeV is better (ID distribution smaller, better separation) but:TOF method suggest low energy ring lowest photon energy is about 100 eV
- yes: simulations: can be done with „Elegant“
- more periods, higher harmonics, higher energy helps (SRW, WAVE)
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more discussion:

- static bump of few 100 µrad needed for separation, depends on energy and polarization
- apertures have to accept the entire power load
- disadtvantage: excitation is always ON