Topics and major milestones for 2019

Aggregation of

- Priority list from first meeting of beam dynamics working group (<u>link</u>)
- Follow-up from LHC Injectors Upgrade Workshop (<u>link</u>)

Extraction of committments for LIU-PS beam dynamics working group:

| Due date | Торіс | Responsible |
|----------|--|----------------|
| Jun-19 | Performance predictions for LS2 RF upgrades | BE-RF |
| Jun-19 | Longitudinal impedance source identification | BE-RF |
| Sep-19 | Define energy at intermediate plateau for LHC beams | BE-RF |
| Dec-19 | 2 GeV injection Space charge simulations to validate tune spread scaling | BE-ABP, TE-ABT |
| Dec-19 | PS microwave instability (ions) | BE-RF, BE-ABP |
| Dec-19 | Longitudinal instability simulations / benchmarking | BE-RF |
| Dec-19 | Investigate horizontal blow-up with large longitudinal emittance | BE-ABP, TE-ABT |
| Dec-19 | Flat top horizontal instabilities (e-cloud) | BE-ABP, BE-RF |
| Jun-20 | Review longitudinal parameters at PS-SPS transfer (coordination) | BE-RF |
| Jun-20 | Longitudinal instabilities with small longitudinal emittance (PS-SPS transfer) | BE-RF |

