

1) Lanch the WS:

Control → SPS beam measurements → SPS Wirescanner (the one with the chicken emoji)

2) In the WS window

- **Select cycle**
 - In the cycles' display choose the green one.
 - Will the cycle name change throught the coast?
- **Select WS**
 - We will use: 41677.V, 51637 .H
- **Basic set up**
 - Bunch pattern 1
 - Set delays:
 - We want to measure at the early part of the cycle.
 - However, we need to wait 3 seconds after the beginning of the cycle before scanning!
 - IN: 3000 ms and OUT 3500 ms
 - PM voltage → we need to optimize when we have beam.
 - PM selection → PM all

Note 1: The first time we set up the WS and press “**Scan**” it takes some time for it to charge. For the next 15 min, the charging is faster. After that, it needs again more time.

Note 2: Every time we change the WS settings we need to press “**Set**”, such as they are updated.

3) Create the parquet files

- Go to:
/user/spsop/Hannes/2021/injectorrs-beam-monitoring/injectors_beam_monito
ring/monitoring/sps
- Do:
./user/spsop/Hannes/2021/seup_environment_c.sh
- Open ipython
 - run record_bws.py

4) Plot the emittance, linear fit and compute emittance growth

- /afs/cern.ch/work/n/natriant/public/WS_emit_vs_time_SPS_2021