

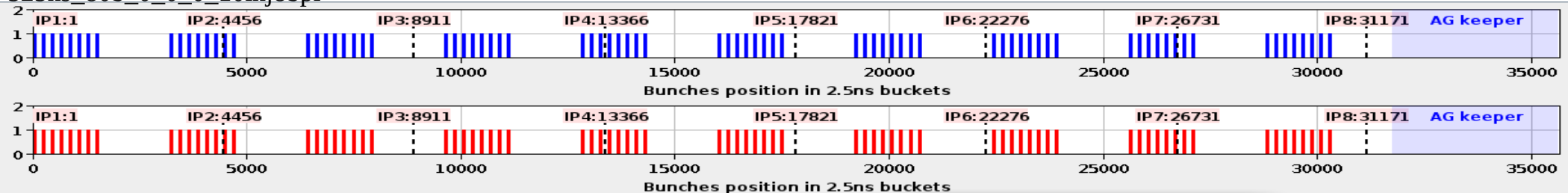
# MD9407: Noise spectrum and emittance growth with different ADT gain

X. Buffat, A. Fornara, S. Kostoglou, G. Sterbini, D. Valuch

## Steps to be taken during MD

- Test the ADT setup at injection (**Just added to the procedure**)
  - Inject one batch of 8b from the SPS in each beam ( $2 \cdot 10^{11}$  p/b,  $2 \mu\text{m}$ )
  - Deploy ADT mask with different gain for the different bunch.
  - Kick individual bunches to calibrate the gain
  - Restore ADT settings
  - Dump
- Perform the measurement at flat top
  - Inject 80 bunches per beam, 8 bunches per injection ( $2 \cdot 10^{11}$  p/b,  $2 \mu\text{m}$ )
  - Ramp, squeeze and collide with beta\* levelling in nominal conditions. (The luminosity from the experiment is needed for lumi-scans)
  - Deploy ADT mask with different gain for the different bunch.
  - Monitor emittance (BSRT), luminosity evolution (experiments) and bunch-by-bunch transverse positions (ADTObsbox)
  - Dump
  - Repeat the measurement with a different set of ADT gains in collision

525ns\_80b\_0\_0\_0\_10inj8bpi



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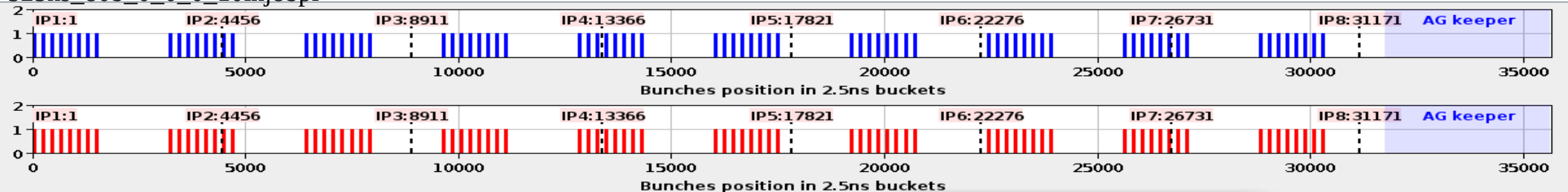
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Device/Property
ADTHorM1.B1/NORM_GAIN_WITNESS
ADTHorM1.B2/NORM_GAIN_BLOWUP
ADTHorM1.B2/NORM_GAIN_CLEANING
ADTHorM1.B2/NORM_GAIN_MAIN
ADTHorM1.B2/NORM_GAIN_WITNESS
ADTHorM2.B1/NORM_GAIN_BLOWUP
ADTHorM2.B1/NORM_GAIN_CLEANING
ADTHorM2.B1/NORM_GAIN_MAIN
ADTHorM2.B1/NORM_GAIN_WITNESS
ADTHorM2.B2/NORM_GAIN_BLOWUP
ADTHorM2.B2/NORM_GAIN_CLEANING

Select All Hierarchy (0/32)

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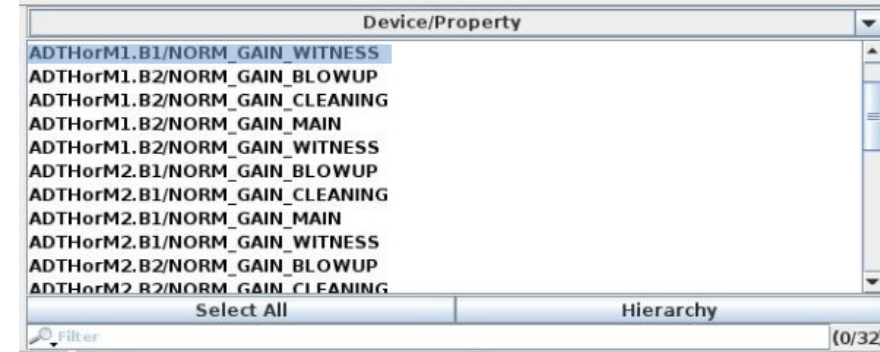


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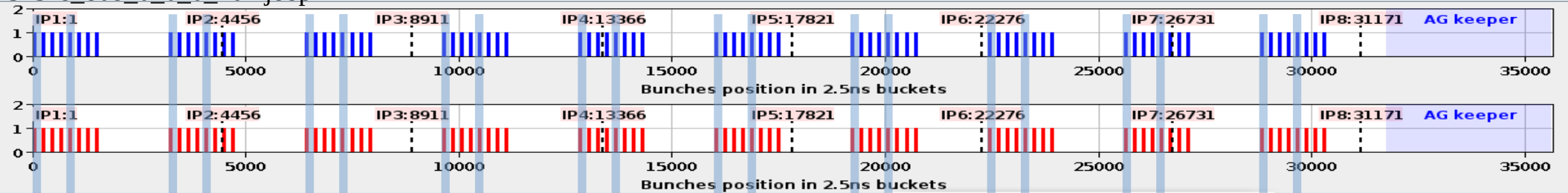
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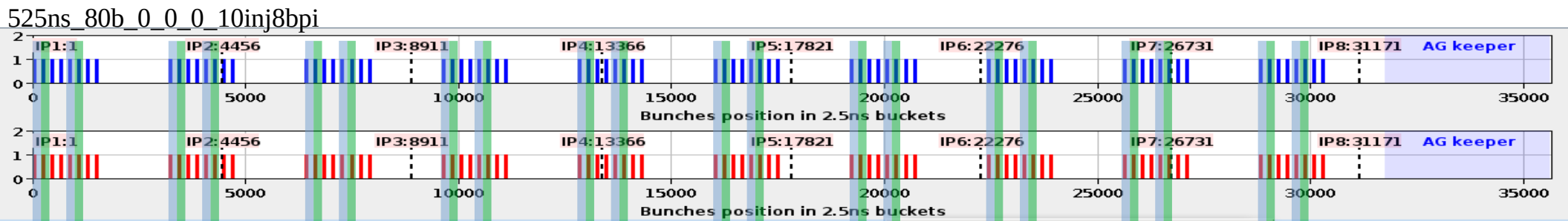
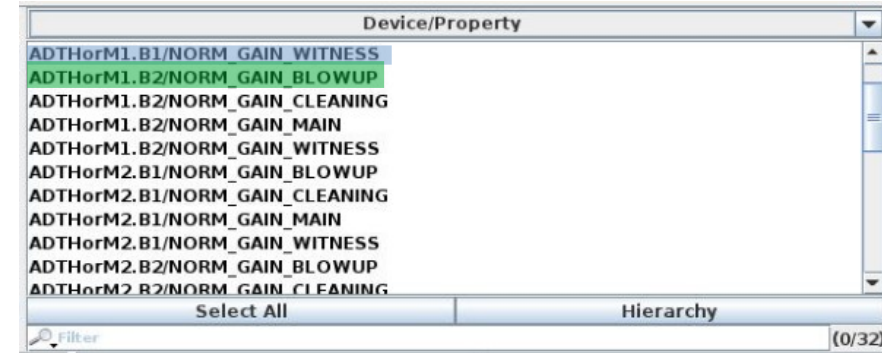


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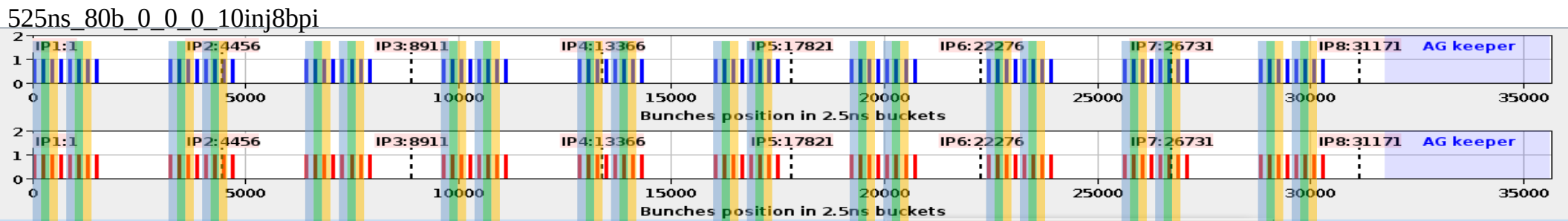
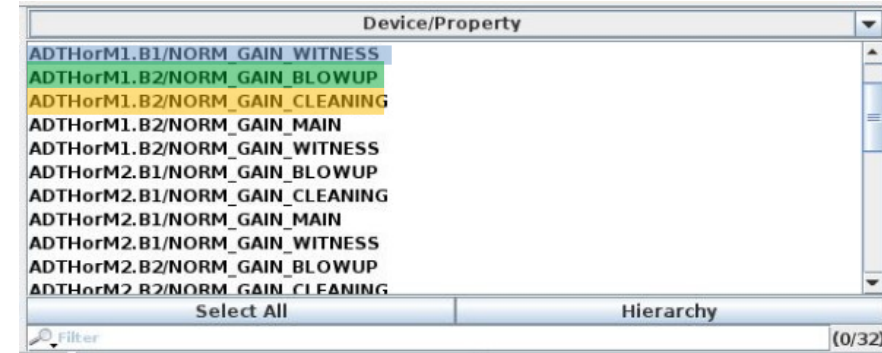


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