



First CS1 TBB-Data

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for the LOFAR-CR Team



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Getting TBB Data

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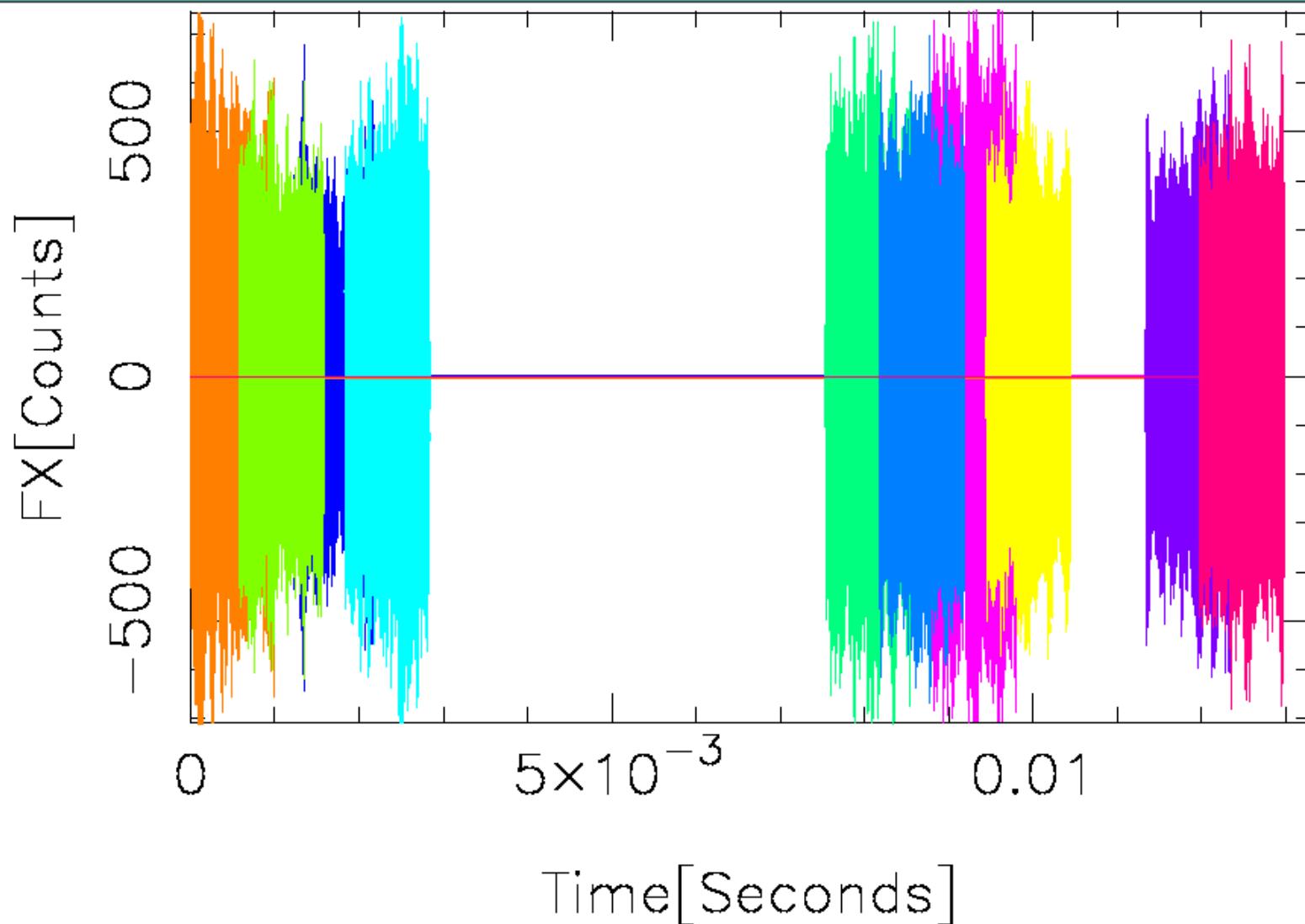
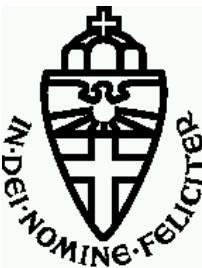
- 2 TBBs installed at CS1 → 32 channels
- No data-acquisition via CEP yet:
 - Need to log onto cs001c
 - Basic TBB operations via tbbctl command
 - Data in “data-dump” format
 - System is not robust: easy to crash the drivers...
- Preliminary routine to read data into lopestools
(since Monday evening...)
- Read out according to position in TBB memory not
to time of data taking



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10-times 1ms

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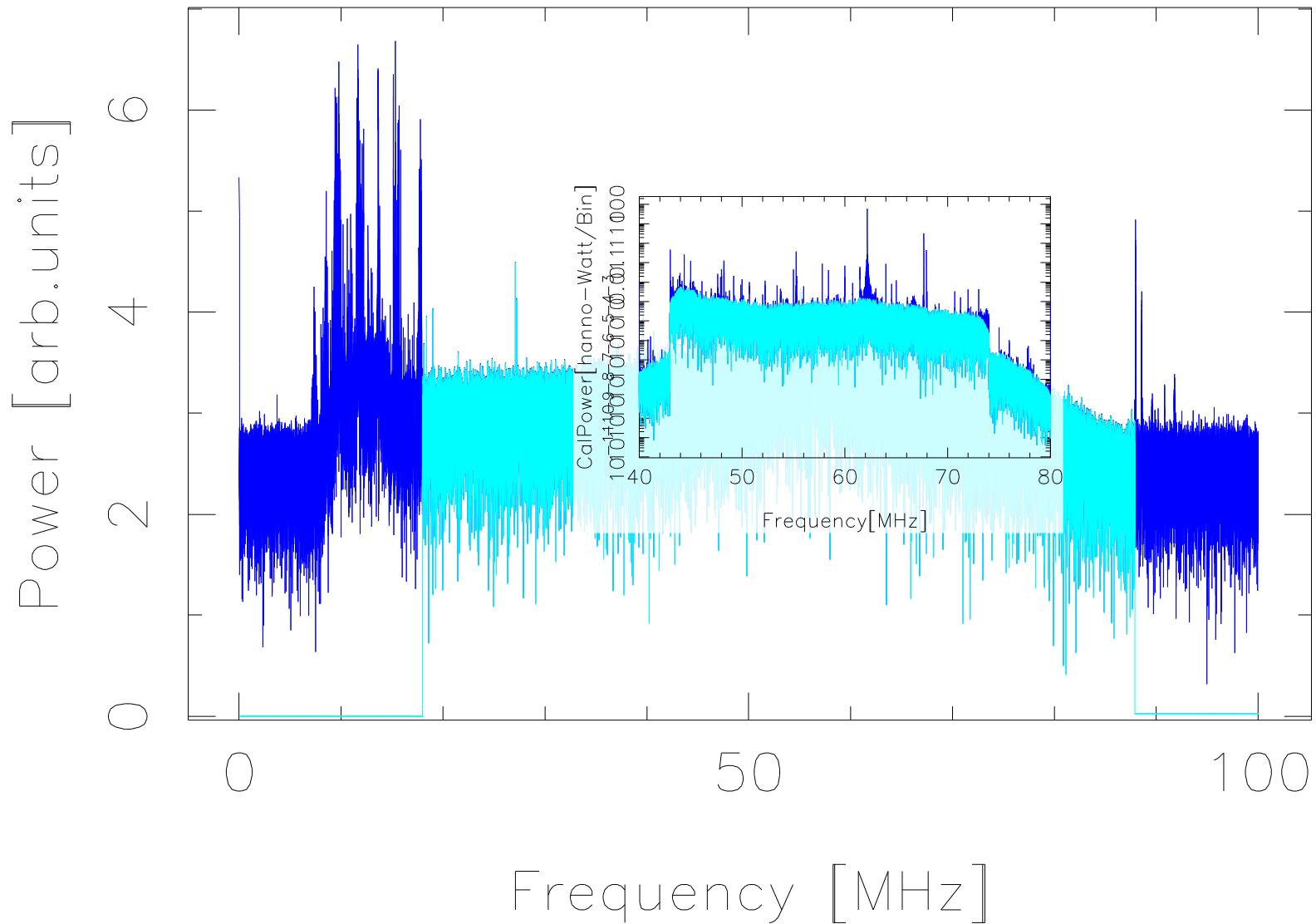
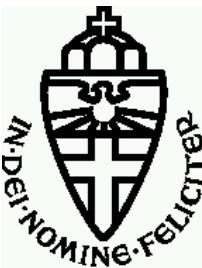




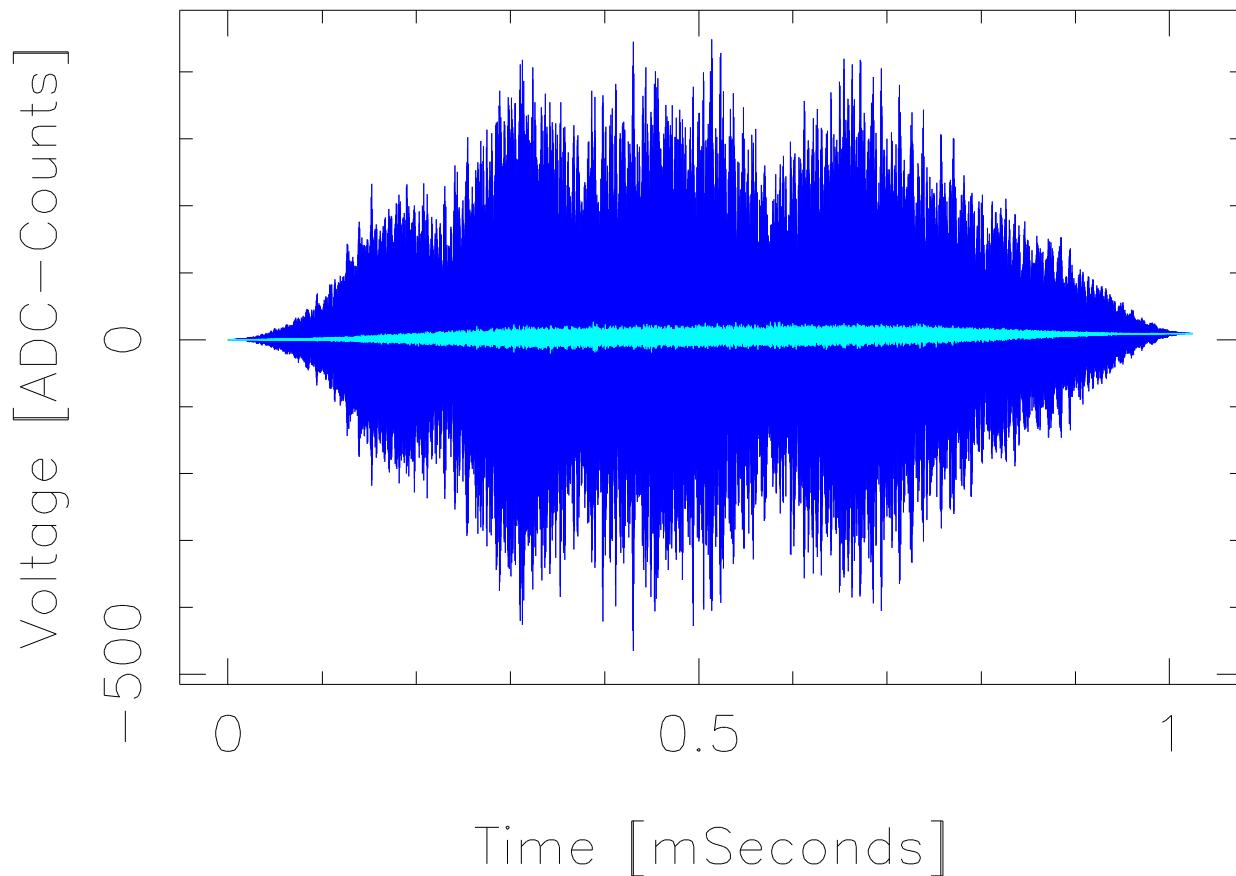
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LBA-Spectrum

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(Un-)Filtered Time Series

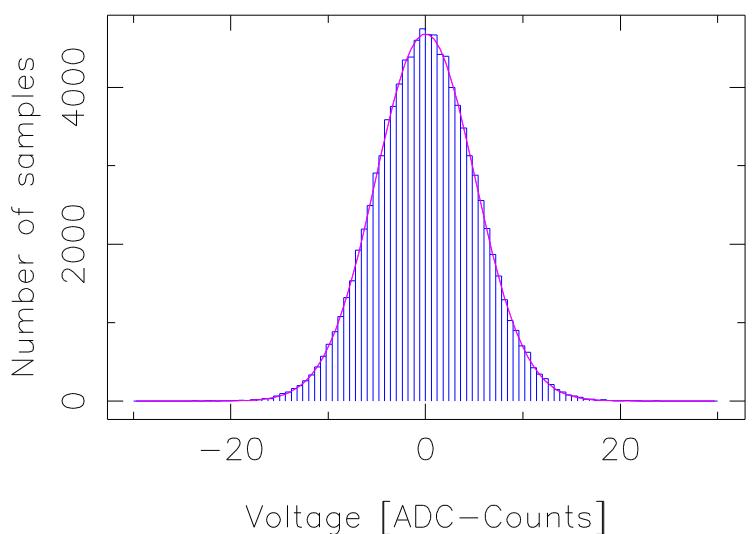
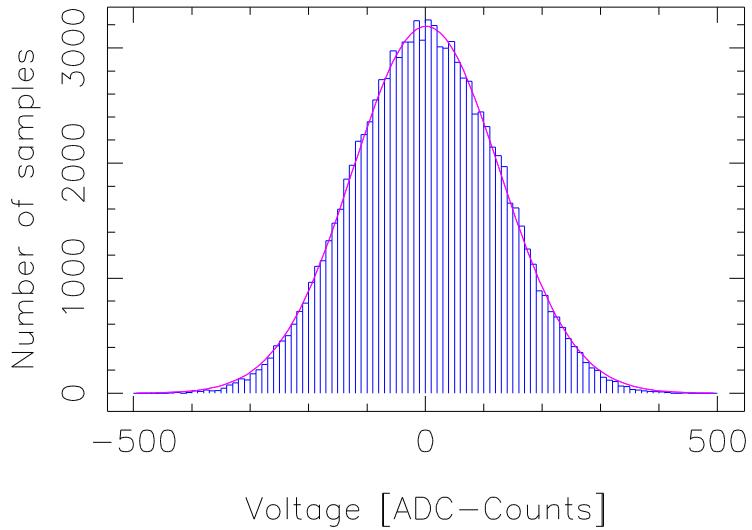
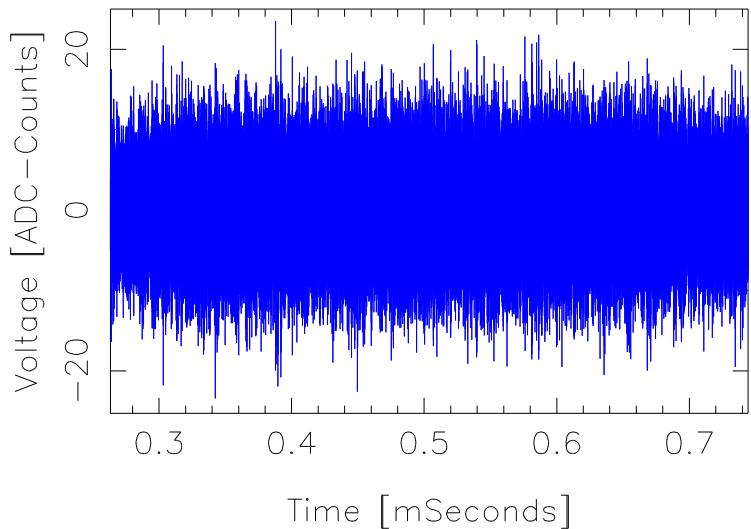
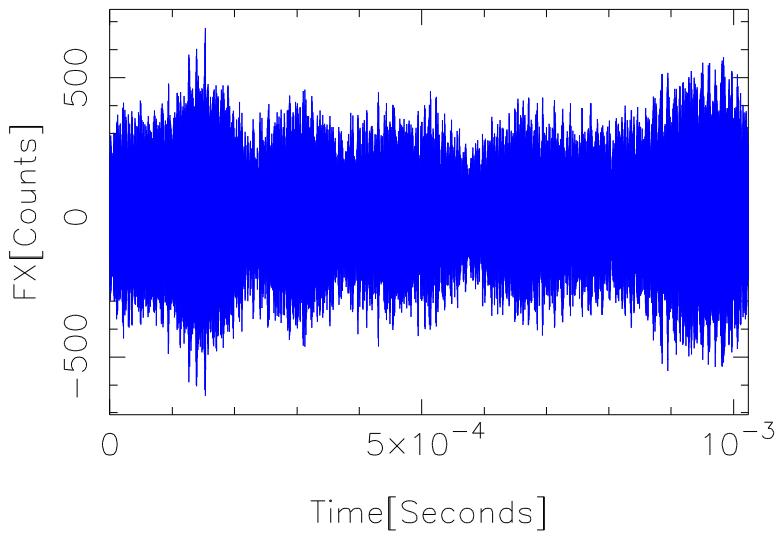
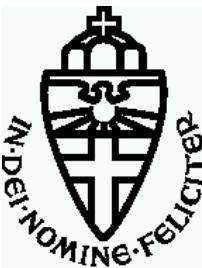




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Time Series Statistics

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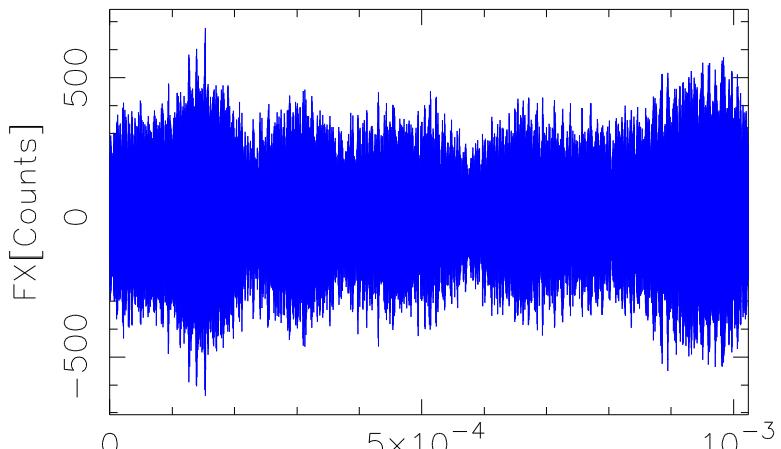
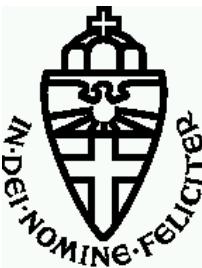




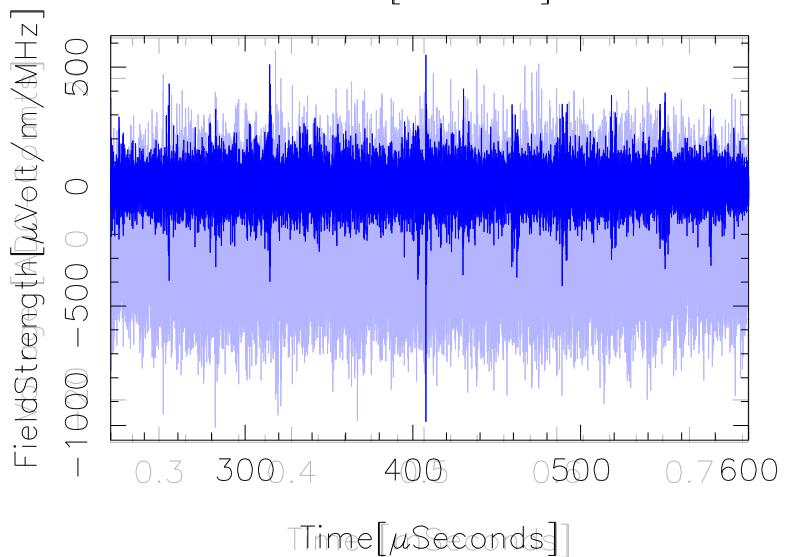
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Time Series Statistics

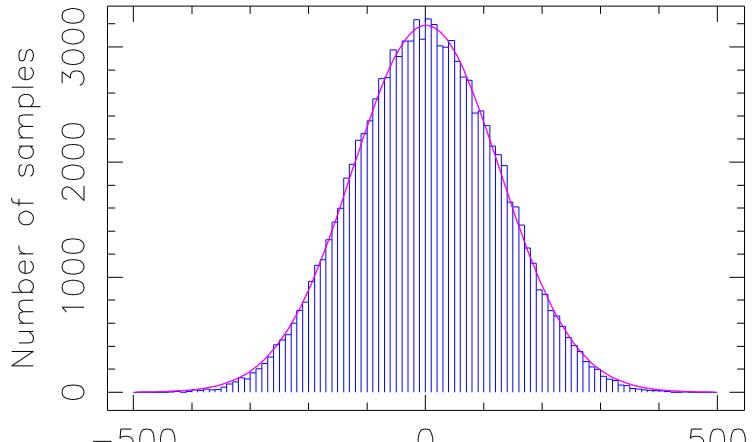
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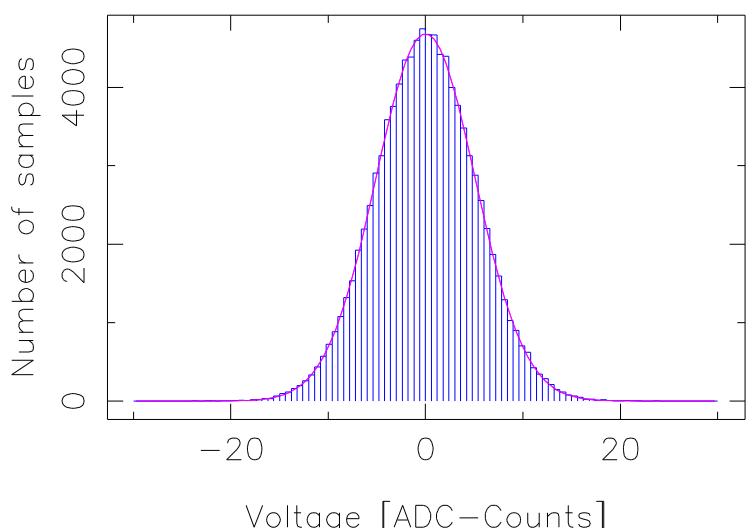
Time [Seconds]



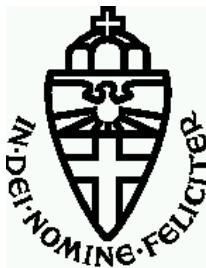
Time [$\mu\text{Seconds}$]]



Voltage [ADC-Counts]



Voltage [ADC-Counts]



■ Near Future:

- Inventory of RFI situation as function of time: Take one dataset every 10(?) minutes for 24h in the week and during weekend
- Test TBB trigger algorithm
 - implement it in software
 - compare software to hardware implementation
 - optimize parameters

■ Future

- DAQ via CEP in new HDF5 file format
- Read in via DAL
- Beamforming/Imaging tests