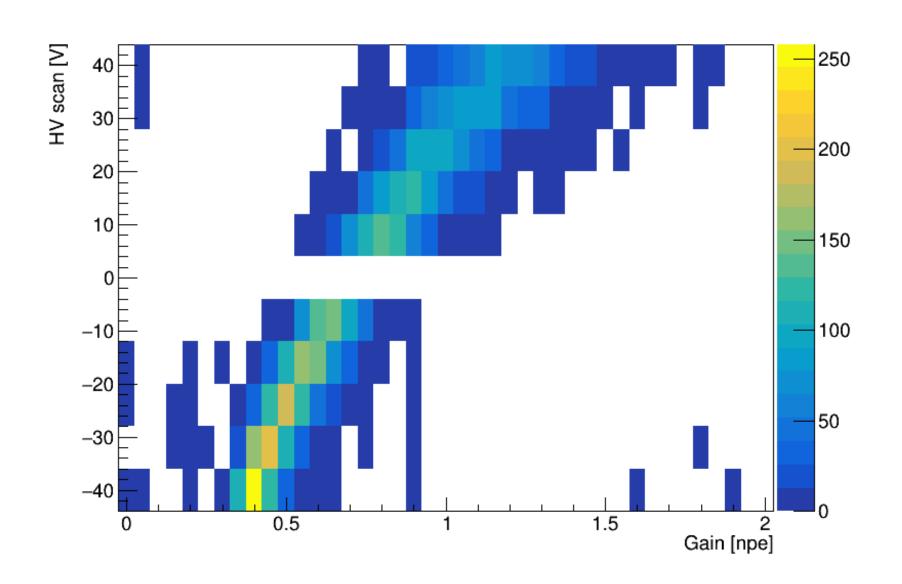
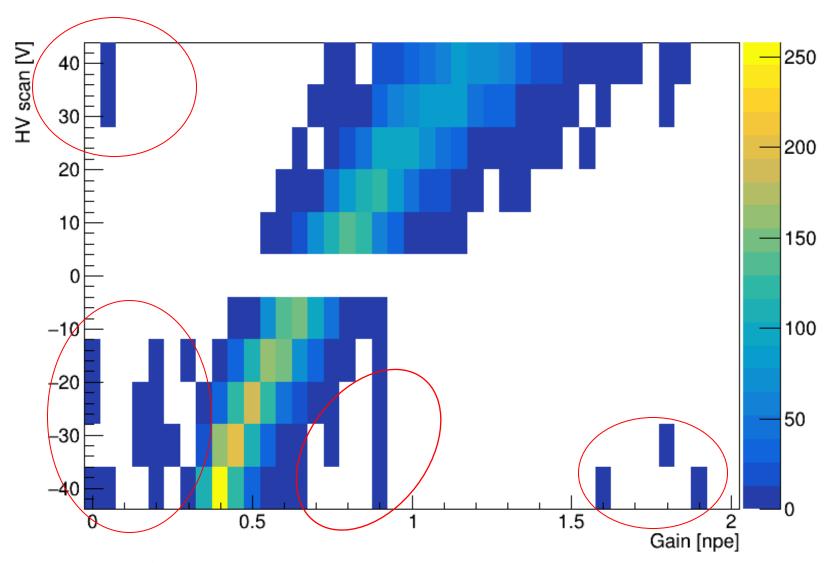
New PMT model

- New PMT model merged to master
- Includes:
 - 4 ns peak in ToT-distribution
 - New charge distribution:
 - Underamplified contribution
 - Threshold-band
- Documentation written
- Currently still different models in use
 - E.g.: Gaussian ToT-fit for HV tuning
- Communicate with calibration group to converge towards consistent PMT-response modeling collaboration-wide
- --> Evaluate possibility to tune HV to gain instead of ToT-peak

HV vs Gain



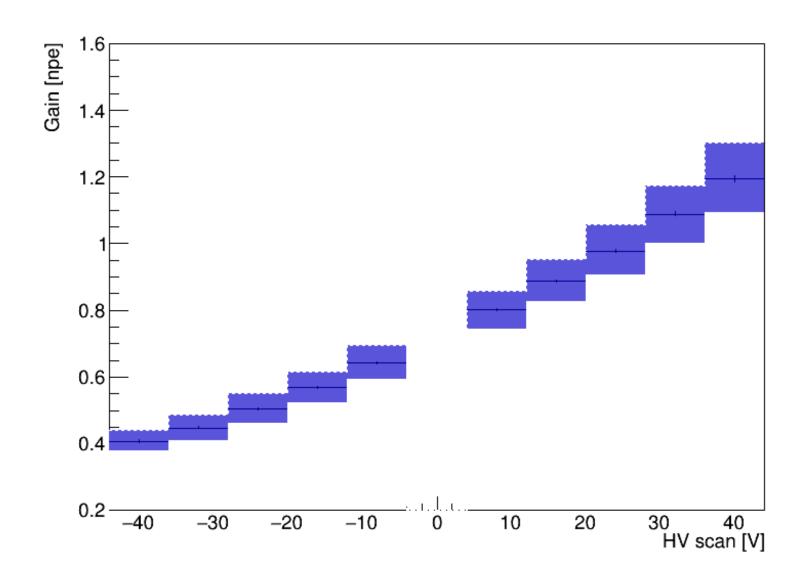
HV vs Gain



Low statistics?

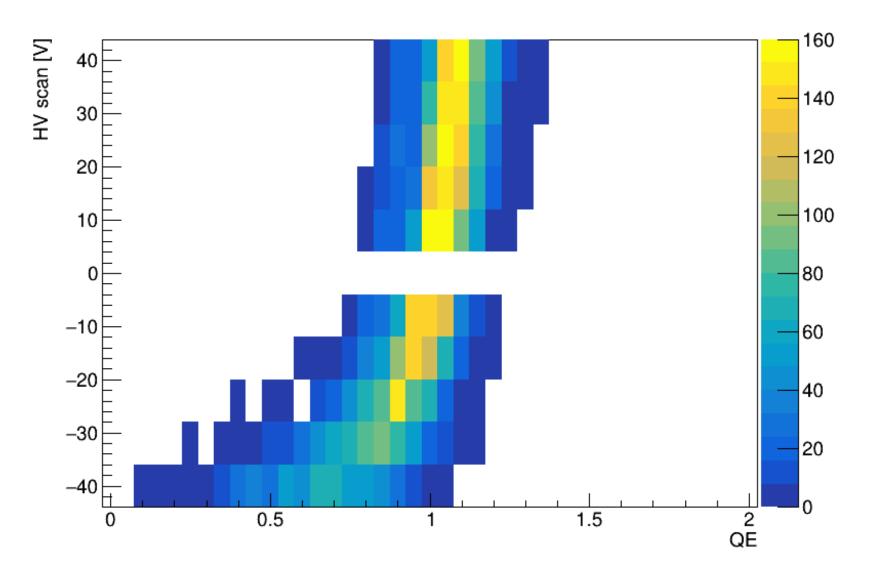
- HV-scan runs are short (~ 10 min)
- Contain only L1-data

HV vs Gain

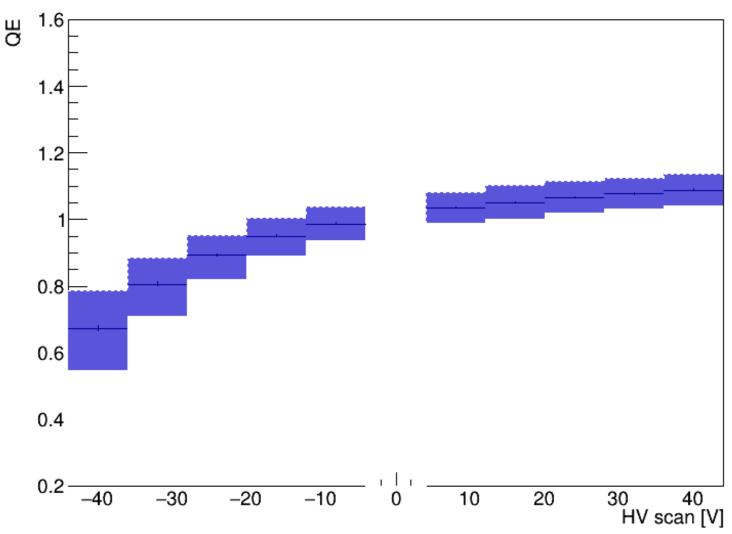


HV vs QE

- Naively expect no dependence on HV
- But collection efficiency decreases as HV goes down!







TODO

- Redo evaluations with higher statistics, e.g. darkroom data
- Evaluate single PMT gain estimation consistency
- Set up fit model for HV as function of gain