

## 4pi standalone

1/ start elogServer (if not already started!) and elogclient

- log in to u3pc2!! and type **'goelog'**  
(a small "window ELOG SERVER" appears. )
- to start elogclient from any DataU PC except u3pc2 type **'goelogclient'**

2/ bias 4pi detectors

- type **'golecroy'**
- in the LeCroy GUI: select 'CONNECT' button  
select 'ON'  
select 'Read File' and choose the bias file  
(Ball.txt for 4pi ball and FA.txt for forward array  
*bias files are located in /user/03045/Current/LeCroy/bias\_files*)
- to bias all Ball detectors type selected value in 'Set Ball Voltage' command line and hit 'exec'  
(note: it takes a little bit until all the voltages are read)

3/ set 4pi discriminator thresholds

- log in to spdaq33, type **'godiscr'**
- in the discriminators.tcl GUI open threshold file: select File->Open->03045\_csi\_trigger.config
- manual change of thresholds if needed – type or select using arrows new threshold value and hit ↵  
(note: fa03 discriminator does not support threshold set value readout)

3a/ select 4pi trigger and multiplicity

- in the discriminators.tcl GUI select 'trig' bar and disable channels not used for triggering (selection among Ball; Ball+FA; FA)
- set threshold for multiplicity selection (mult2~120mV)

4/ start ScalerDisplay

- on u3pc3 machine type **'goscalers'**  
(automatically connects to data stream)

5/ start acquisition

- on u3pc3 machine type **'godaq'**
- in the Readout GUI select 'Record events' and type run comments
- hit 'Begin'

6/ on any data-U3 machine start SpecTcl

- type **'gospec'**
- 'Is this okay (y/n)?' select 'y'
- select 'No' for 'If you want to use new GUI...'
- load corresponding def-files (all4pinew.tcl for 4pi)
- in HiRA SpecTcl Control select 'Attach Online'

## 4pi + HiRA

1/ start elogServer (if not already started!) and elogclient

- log in to u3pc2!! and type **'goelog'**  
(a small "window ELOG SERVER" appears. )
- to start elogclient from any DataU PC except u3pc2 type **'goelogclient'**

2/ bias selected group of 4pi detectors

- on any data-U3 machine type **'golecroy'**
- in the LeCroy GUI: select 'CONNECT' button  
select 'ON'  
select 'Read File' and choose the bias file you need  
(Ball.txt for 4pi ball and FA.txt for forward array  
*bias files are located in /user/03045/Current/LeCroy/bias\_files*)
- to bias all Ball detectors type selected value in 'Set Ball Voltage' command line and hit 'exec'  
(note: it takes a little bit until all the voltages are read)

3/ check biases on HiRA telescopes

- telenet caenhv05 1527

4/ set gains and thresholds for CsI

- log in to spdaq33, type **'gopico'**
- select 'Open Shaper File' -> 03045\_ca48\_disc.dat
- select 'Open Discriminator File' -> 03045\_ca48\_shap.dat  
(*files are located in /user/03045/Current/Pico/input-files*)

5/ set 4pi discriminators thresholds

- log in to spdaq33, type **'godiscr'**
- in the discriminators.tcl GUI open threshold file: select File->Open-> 03045\_csi\_trigger.config
- manual change of thresholds if needed – type or select using arrows new threshold value and hit ↵  
(note: set value readout is currently not implemented for fa03 discriminators)

5a/ select 4pi trigger and multiplicity

- in the discriminators.tcl GUI select 'trig' bar and disable channels not used for triggering (selection among Ball; Ball+FA; FA)
- set threshold for multiplicity selection (mult2~120mV)

5b/ select CSI multiplicity

in the discriminators.tcl GUI select 'gate+scaler' bar and for channel *CSImult* set threshold for multiplicity selection (mult1=60mV; mult2=185mV)

6/ configure XLM and chipboards

- log in to spdaq33, to configure XLM type **'goXLM'**
- select File->fast configure
- quit
- to load chipboards setup file type **'gochip'**
- select File->Load (loads automatically from ASIC\_IN.setup)

- note: in case program would crash after loading the setup file restart and reload the file again – no fast configure needed anymore!

**7/** start ScalerDisplay

- on u3pc3 machine type **'goscalers'**  
(automatically connects to data stream)

**8/** start acquisition

- on u3pc3 machine type **'godaq'**
- in the Readout GUI select 'Record events' and type run comments
- hit 'Begin'

**9/** on any data-U3 machine start SpecTcl

- type **'gospec'**
- 'Is this okay (y/n)?' select 'y'
- select 'No' for 'If you want to use new GUI...'
- load corresponding def-files
- in HiRA SpecTcl Control select 'Attach Online'

**OTHER**

**a/** to change set point on chiller

- type **'gochiller'**

**b/** to run pulser

- type **'gopulser'**