APPENDIX

Synchronization monitoring procedure

In Desktop 2

To launch the processes for monitoring the synchronization between BigRIPS, AIDA and BRIKEN DACQs open 4 terminals:

Terminal 1 (DataSink) type:

>ssh aida@d05 (pwd: aida)

>cd /home/aida/DataPackage/DataSink/Linux64

>./DataSink -i 3

Terminal 2 (SynCheck) type:

>ssh -X aida@d05

>cd /home/aida/SyncCheck

>./SynCheck

(opens a ROOT canvas with two 1D histograms and two 2Dhistograms)

Terminal 3 (BigRIPS Data Relay) type:

>ssh aida@d05

>cd /home/aida/ribfts/ribftssender

>./ribftssender mar17ca debug

Terminal 4 (AIDA Data Relay) type:

>ssh npg@aidas1 (pwd: nuclear)

>DataRelayFilter -n 10.32.0.12 -p 10307 -I 2

In **Desktop 1**:

Gasific MainWindow (Briken Data Relay):

- In the DAQ Control tab: Click "Start Sync Monitoring" button.
- In the pop up window set server ip and port (ip:10.32.0.12, port:10305)

To synchronize (reset all three TimeStamps):

• In the DAQ Control tab: Click "Send Sync Pulse" button

WARNING: **DO NOT PRESS Send Sync Pulse in the middle of a run**, or in general unless there is a reason for that (ask an expert)

In the ROOT panel you should see a one channel peak around 0 in the lower 1D histograms and 1 pixel peak around 0:0 in the upper 2D histograms (you might need to expand the histogram in order to see it)