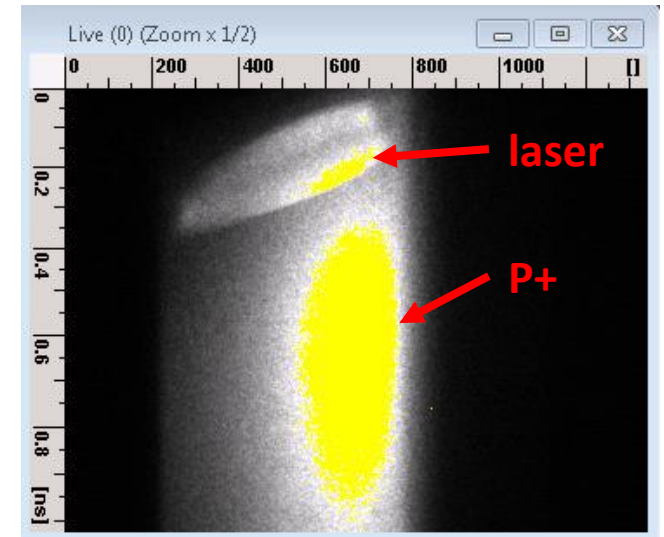# BI streak commissioning laser and p+

26-30 Sept. 2016

Setting trigger delays

Tuesday

- Laser and p+ pulse visible on the photodiode

- Streak trigger delay adjusted -> laser pulse monitored on 1ns window

- Timing adjusted to see p+ and laser on streak camera

? streak shows p+ and laser overlapped but photodiode and MPP streak show 10ns separation **?**
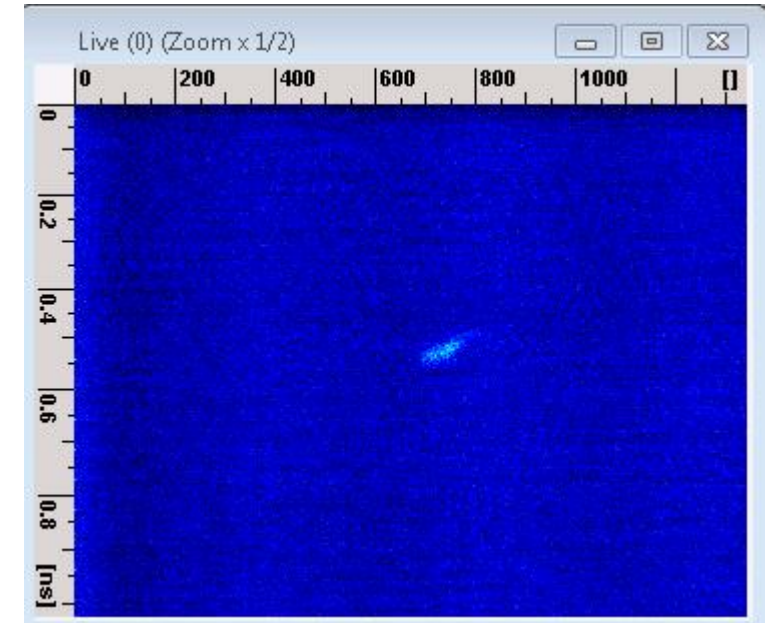
-> Streak is monitoring a laser post pulse !
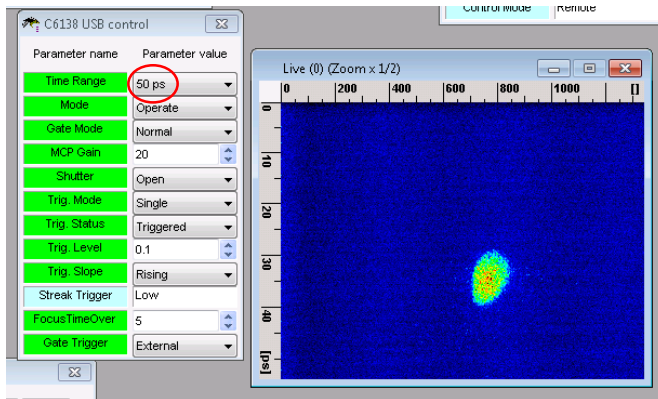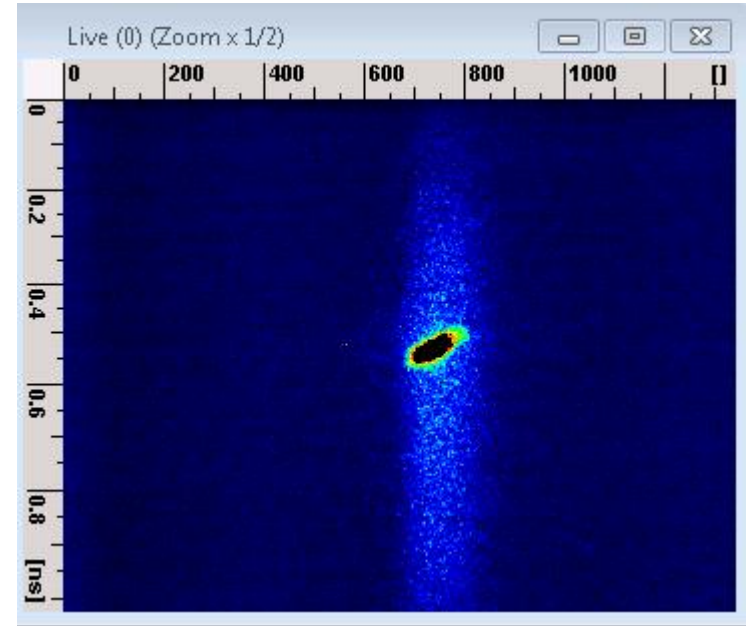
Setting trigger delays

Wednesday

- Early access to close the streak slit -> improve resolution.

- At present slit at 30 pixels:

  - 58 ps @ 1ns window

  - 3 ps @ 50 ps window

- Main laser pulse monitored with 1ns window

- Pre and post laser pulses observable with the streak

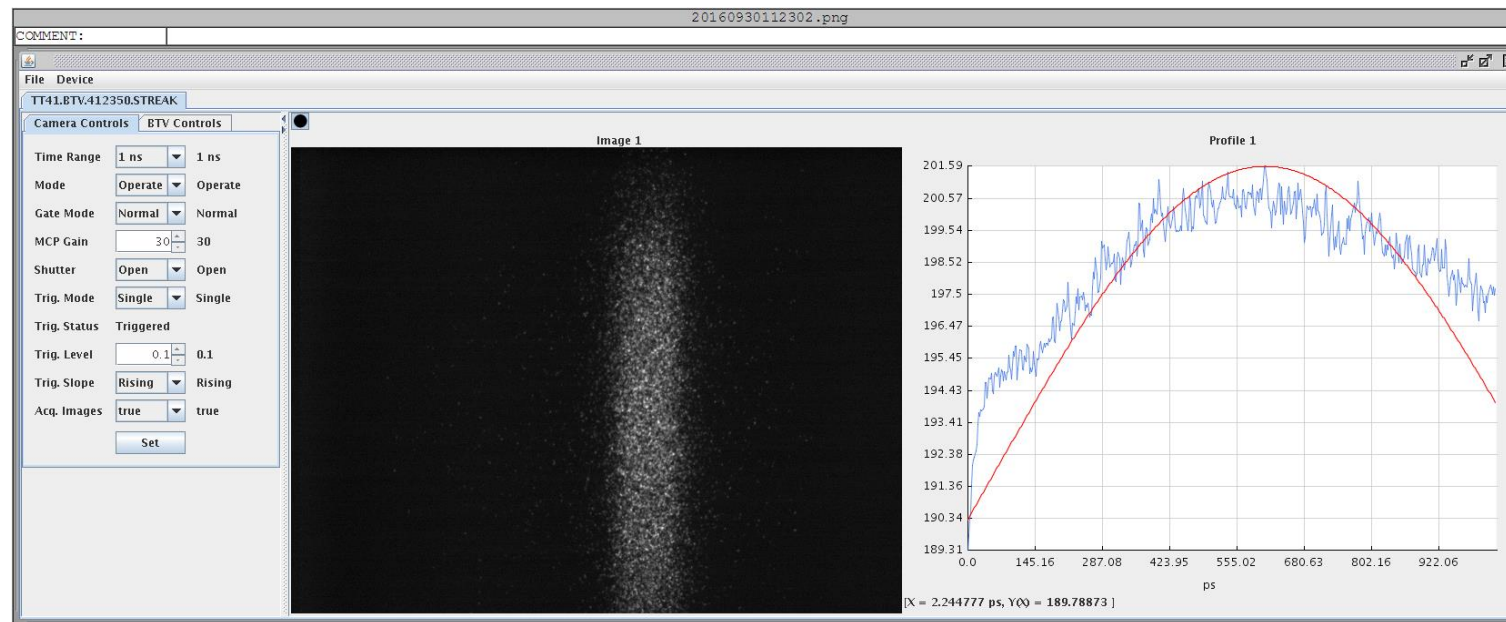# Laser and p+ synchronization

Thursday

- Laser and p+ synchronized !

- Streak trigger delays found for all windows (1ns to 50 ps)

Test of BI streak expert app.

Friday

- Expert app can acquire, save and load images / profiles

To do…

- Software: develop peak detection algorithm based on acquired images. Principles to be discussed.

- Optical line: lab tests to understand why focussing is worse than expecxted

- Streak: close slit. In perspective: add motorisation for remote control

- Streak PC: replace present one with new Kontron PC.

Successful commissioning

thanks to the great collaboration and help

of AWAKE team !