

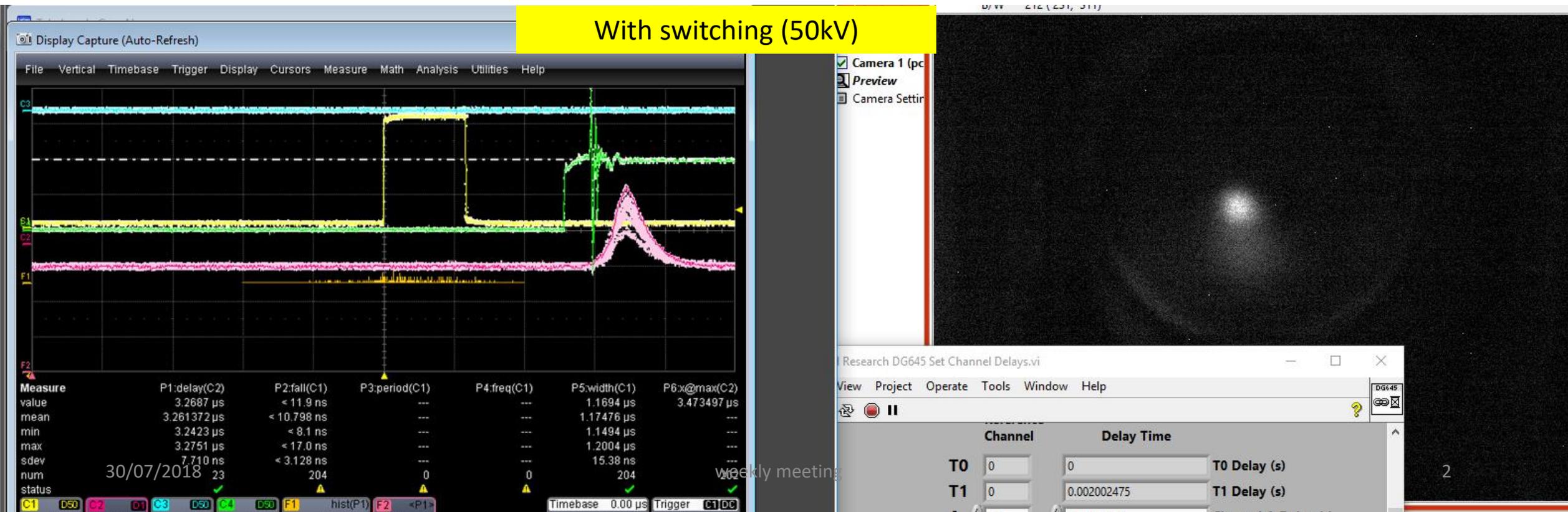
# Weekly report

SNU

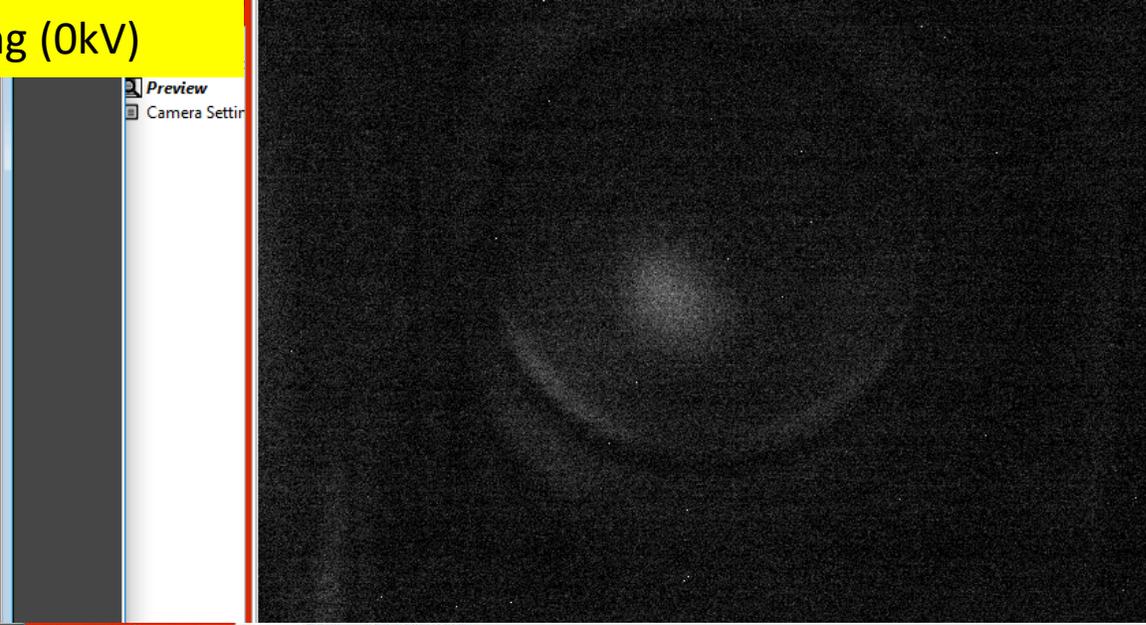
BongHo Kim

# Decelerator working

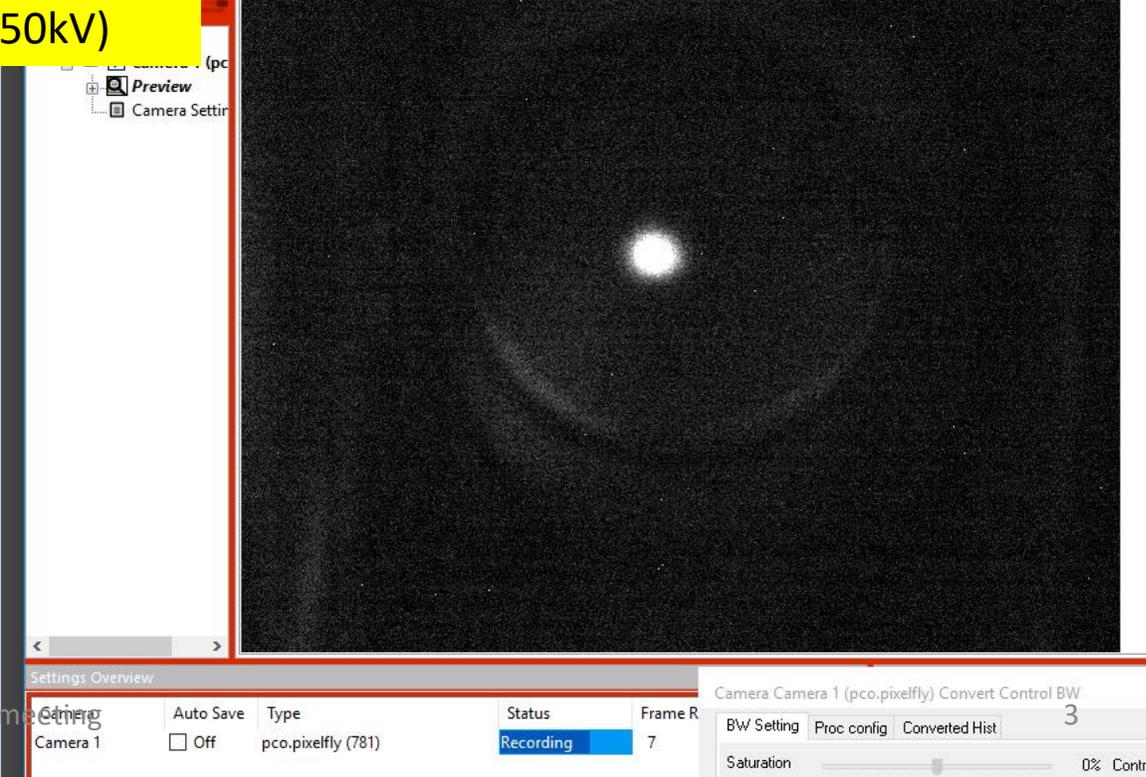
- Decelerator was tested with 100keV H- beam
- Below picture shows decelerated beam by 50kV electrode with switch
- (green : switching trigger)



# Without switching (0kV)



# Without switching (50kV)



30/07/2018

weekly meeting

TELEDYNE LECROY Waiting for Trigger 7/27/2018 4:36:02 PM

Settings Overview

Camera	Auto Save	Type	Status	Frame R
Camera 1	<input type="checkbox"/> Off	pco.pixelfly (781)	Recording	7

Camera Camera 1 (pco.pixelfly) Convert Control BW

BW Setting Proc config Converted Hist 3

Saturation 0% Contrast

# Decelerator working

- By giving 50kV in the electrode, focusing effect was shown as einzel lense.
- By giving switching trigger, part of beam is decelerated with focusing and part of them is not decelerated (beam size :477ns, 0.5m tube)
- Expected delay by 50kV : ~100ns (~40ns decay without switching)

## Delay time by swtching

- no HV : 3.164us +-<0.010us (#42)
- 50kV ,1.0023us delay : 3.207 +-0.007us (#20)
- 50kV, 1.0024us delay : 3.195+-0.012us (#31)
- **50kV, 1.00245us delay: 3.261+-0.008 us (#23)**
- 50kV, 1.0025us delay: 3.226+-0.021 us (#39)
- 50kV, 1.1us delay: 3.18 +-0.017 us (#21)