

Summer Program Update

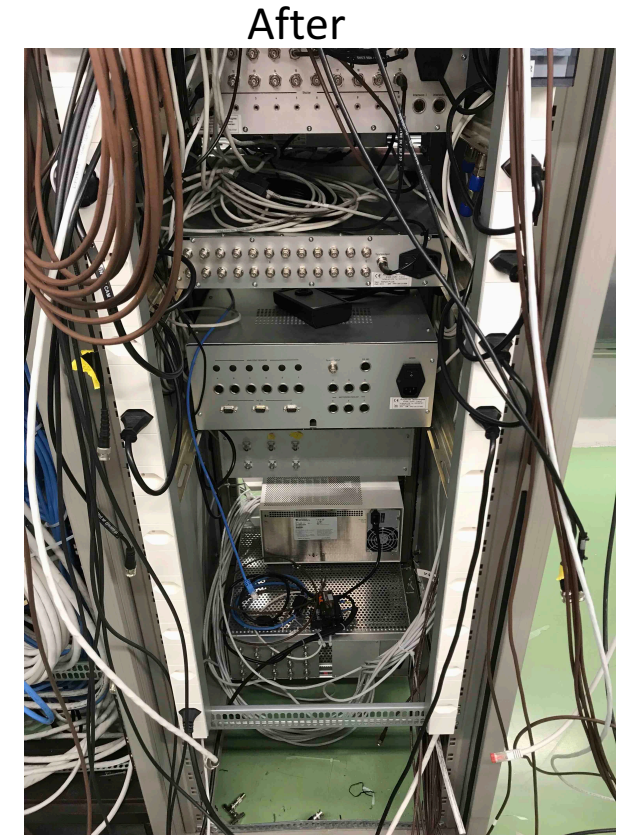
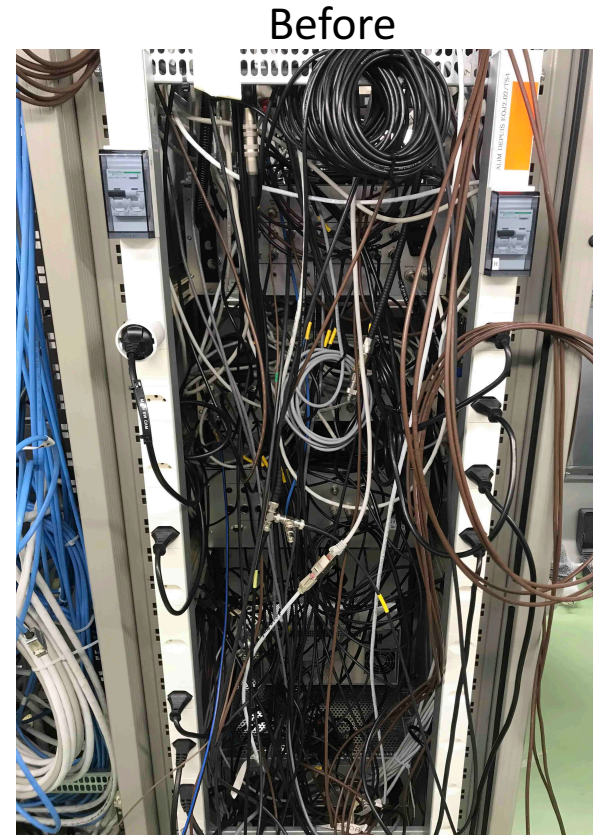
19/06/2019

Current Status

- Access system cabling ongoing.
 - Tomasz Ladzinski says they are behind schedule, working weekends.
 - Finishing the work on the access system is the highest priority at AWAKE!
- Meeting for DSO test is scheduled for 25 June.
 - We do not know when the DSO test will be.
 - Earliest possibility seems to be 5 July, but likely later.
- Controls are mostly down.
 - InCA service down since Monday. Back today. Gone tomorrow. Back next week. . .
- Josh finished laser health checkup with Amplitude.

To Do List (Independent of Access System)

- Re-cable racks in laser room.
- Setup new triggers.
- **Clean up Streak Room. Volunteers?**
- Restart PXI camera servers.
- Test burst mode data acquisition.
- Josh's work on new laser focal system.
- Eugenio's measurement with Streak Camera.



To Do List (with Access System)

- Restart vacuum pumps.
- Check out modulator.
- Check out klystron.
- Alignment of laser line.
- RF conditioning.
- Check QE of cathode.
- Check new DAQ with real data.

Experimental Plans

1. Electron source measurements (Seongyeol, Steffen)
 - Make accurate comparison between simulation and measurement.
 - **Measure bunch length.**
2. Electron source optimization studies (Spencer, Jerry, Seongyeol, Steffen)
 - Test algorithms for quickly tuning beam emittance.
 - Algorithms for feedback and stabilization.
 - Fast emittance measurement.
3. Electron beamline studies (Francesco)
 - Nothing planned so far.
4. BPM studies (Eugenio)
 - Requires electron beam down the beamline.
5. Laser propagation studies (Josh, Wigner)
 - To be discussed in Josh's presentation.

Short Term Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
	17 June	18 June	19 June	20 June	21 June	22 June	23 June	24 June	25 June	26 June	27 June	28 June
Works								Picture Plasma Cell 24-26/06	Picture Plasma Cell 24-26/07	Picture Plasma Cell 24-26/08		
Access				Access System TAG 41	Access System TAG 41						Access System TAG 41	Access System TAG 41
Measurement												
Laser	Amplitude Visit	Amplitude Visit						Laser Line Maintenance	Laser Line Maintenance	Laser Line Maintenance	Laser Line Maintenance	Laser Line Maintenance

<https://docs.google.com/spreadsheets/d/19SL04wsiqymQtb9b6KmwJUzU97zxfjAAtqEdOPjP9jo/edit?usp=sharing>

Long Term Schedule

	Late June	Early July	Late July	Early August	Late August	Early September	Late September	Early October	Late October	Early November	Late November
Access and interlocks	Non-functional	DSO tests									
Controls	Spencer et al: Testing	Spencer et al: Testing	Spencer et al: Testing								
RF	Non-functional	Non-functional	Conditioning						Replace and test new klystron?	Replace and test new klystron?	
High power laser	Non-functional	Non-functional	Realignment								
UV Laser	Non-functional	Non-functional	Realignment								
Electron source				Electron source studies			Source studies	Source studies			
Electron Beamline							Beamline studies	Beamline studies			
Rb plasma cell					Laser-plasma studies	Laser-plasma studies					
Away dates		Steffen away 5th-21st	Steffen away 5th-21st		Spencer away 19.08-09.09	Spencer away 19.08-09.09					

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