Yichao

For shutting off, go through the checklist before turning off the computers.

- Turn off equipments
- Turn off computers

Wait before everyone else finish their equipment shutoff before turning off the computers.
For powering up, first turn the computers on before turning on the equipments.

- Turn on computers
- Turn on equipments
- Check computer connection to devices

Also wait before everyone else finish their corresponding steps before starting the next one.

Record settings before turning things off.
All the lasers should be turned off.
All the home built ±15 V, 5V power supplies should be on UPS. 24 V ones are mainly powering amplifiers and can be shut down.
All locks should be disabled.
All temperature controllers should be on UPS and left on.

For each equipment, check if it is in used. Then check the power and make sure if is/should be on UPS. Make sure the "On UPS" label is correct.

Equipments are mostly located around the laser table facing the wall and the computer.

Equipment list

ID	Equipment	Location
Laser table facing computer or the wall top → down, west side → south side		
1	Home power (±15,5)	Lv2 above 623 nm box
2	Benchtop power 2+1 Chn	Lv2 above 1.0 Cs MOT facing computer
3	Benchtop power 1 Chn	Lv2 above 1.0 Cs MOT facing computer
4	Benchtop power 1 Chn (x3)	Lv2 above 1.0 Cs MOT facing wall
5	Home power (24) (x2)	Lv2 above 1.0 Cs Raman
6	Benchtop power for 1.0 Cs Raman	Lv2 above New Focus lock box

7	High voltage power	Lv2 above timebase drivers
8	Benchtop power for 1.0 Na Raman seed	Lv2 above oscilloscope
9	Benchtop power 2+1 Chn for Cs MOT beat lock	Lv1 above 1.0 Cs MOT facing computer
10	Till driver v2 for 1.0 Cs MOT	Lv1 above benchtop powere supply
11	Home temp servo for 1.0 Cs MOT	Lv1 above Till driver
12	Valan	1.5 amplifier stack Lv1 above 1.0 Cs MOT
13	Till driver v2 for 1.5 Na Raman	Lv1 above 1.5 Na Raman
14	Home temp servo for 1.5 Na Raman (x2 + adaptor box)	Lv1 above 1.5 Na Raman
15	New Focus driver for Cs Raman	Lv1 above 1.0 Cs Raman
16	Benchtop power	Lv1 next to New Focus driver
17	Shutter driver	Lv1 above 1.0 Cs Raman
18	New Focus lock box for 1.0 Cs Raman	Lv1 above 1.0 Cs Raman
19	Timebase drivers for 1.0 Na Raman and Na D2	Lv1 above Thorlabs temp servo
20	Thorlabs temp servo for 1.0 Na Raman doubler	Lv1 above 1.0 Na seed
21	Home lock box for Na D2	Lv1 above 1.0 Na seed
22	MPB Raman laser	Lv1 above 1.0 Na MOT
23	PLL for Cs Raman	Next to 1.0 Cs Raman
24	PLL for Cs MOT	Below Cs MOT

1 Level 2 cloud

- Off On **Home power (±15,5) [1]**
  Lv2 above 623 nm box

  Turn off check list
  - ☐ Check On UPS

- Off On **Benchtop power 2+1 Chn [2]**
  Lv2 above 1.0 Cs MOT facing computer
  Record voltage/current values:

	Voltage	Current
Left		
Right		

  Turn off check list
  - ☐ Decide (On UPS / Turn off)
  - ☐ (if on UPS) Check On UPS
  - ☐ (if turn off) Unplug load
  - ☐ (if turn off) Label and zip tie loads to the power supply
  - ☐ (if turn off) Turn off and unplug from wall

  Turn on check list
  - ☐ (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
  - ☐ (if turn off) Plug the load back in

- Off On **Benchtop power 1 Chn [3]**
  Lv2 above 1.0 Cs MOT facing computer
  Record voltage/current values:

Voltage	Current

  Turn off check list
  - ☐ Decide (On UPS / Turn off)
  - ☐ (if on UPS) Check On UPS
  - ☐ (if turn off) Unplug load
  - ☐ (if turn off) Label and zip tie loads to the power supply
  - ☐ (if turn off) Turn off and unplug from wall

  Turn on check list
  - ☐ (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
  - ☐ (if turn off) Plug the load back in

- Off On **Benchtop power 1 Chn (x3) [4]**

Lv2 above 1.0 Cs MOT facing wall

Record voltage/current values:

	Voltage	Current	UPS	OFF
1				
2				
3				

Turn off check list

- ☐ Decide (On UPS / Turn off)
- ☐ (if on UPS) Check On UPS
- ☐ (if turn off) Unplug load
- ☐ (if turn off) Label and zip tie loads to the power supply
- ☐ (if turn off) Turn off and unplug from wall

Turn on check list

- ☐ (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- ☐ (if turn off) Plug the load back in

- Off On **Home power (24) (x2) [5]**

Lv2 above 1.0 Cs Raman

Turn off check list

- ☐ Decide (On UPS / Turn off)
- ☐ (if on UPS) Check On UPS
- ☐ (if turn off) Unplug load
- ☐ (if turn off) Label and zip tie loads to the power supply
- ☐ (if turn off) Turn off and unplug from wall

Turn on check list

- ☐ (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- ☐ (if turn off) Plug the load back in

- Off On **Benchtop power for 1.0 Cs Raman [6]**

Lv2 above New Focus lock box

Record voltage/current values:

Voltage	Current

Turn off check list

- Decide (On UPS / Turn off)
- (if on UPS) Check On UPS
- (if turn off) Unplug load
- (if turn off) Label and zip tie loads to the power supply
- (if turn off) Turn off and unplug from wall

Turn on check list

- (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- (if turn off) Plug the load back in

- Off On **Benchtop power for 1.0 Na Raman seed [8]**

Lv2 above oscilloscope

Record voltage/current values:

Voltage	Current

Turn off check list

- Decide (On UPS / Turn off)
- (if on UPS) Check On UPS
- (if turn off) Unplug load
- (if turn off) Label and zip tie loads to the power supply
- (if turn off) Turn off and unplug from wall

Turn on check list

- (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- (if turn off) Plug the load back in

- Off On **High voltage power [7]**

Lv2 above timebase drivers

Follow home lock box for Na D2 [21].

2 Level 1 clound

- Off On **Benchtop power 2+1 Chn for Cs MOT beat lock [9]**
  Lv1 above 1.0 Cs MOT facing computer
  Record voltage/current values:

	Voltage	Current
Left		
Right		

Turn off check list

- Decide (On UPS / Turn off)
- (if on UPS) Check On UPS
- (if turn off) Unplug load
- (if turn off) Label and zip tie loads to the power supply
- (if turn off) Turn off and unplug from wall

Turn on check list

- (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- (if turn off) Plug the load back in

- Off On **Till driver v2 for 1.0 Cs MOT [10]**
  Lv1 above benchtop powere supply
  Record current values:

Current	

Turn off check list

- Turn off
- Unplug power (zip tie to controller)

Turn on check list

- Plug in power
- Turn on

- Off On **Home temp servo for 1.0 Cs MOT [11]**
  Lv1 above Till driver

Turn off check list

- Check On UPS

- Off On **Valan [12]**
  1.5 amplifier stack Lv1 above 1.0 Cs MOT
  Check with 1.5 to record setting

Frequency	
Amplitude	

Turn on check list

- Restore settings

- Off On **Till driver v2 for 1.5 Na Raman [13]**
  Lv1 above 1.5 Na Raman
  Record current values:

Current	

  Turn off check list
  - Turn off
  - Unplug power (zip tie to controller)

  Turn on check list
  - Plug in power
  - Turn on

- Off On **New Focus driver for Cs Raman [15]**
  Lv1 above 1.0 Cs Raman
  Record Temperature, Current, Piezo voltage
  Temperature is accessible in the menu under system status

F3 Current	
F3 Piezo Voltage	
F3 Temperature	
F4 Current	
F4 Piezo Voltage	
F4 Temperature	

  Turn off check list
  - Turn off output.
  - Check plugged into UPS.

  Turn on check list
  - (Turn on)

- Off On **Home temp servo for 1.5 Na Raman (x2 + adaptor box) [14]**
  Lv1 above 1.5 Na Raman

  Turn off check list
  - Check On UPS

- Off On **Benchtop power [16]**
  Lv1 next to New Focus driver
  Record voltage/current values:

Voltage	Current

  Turn off check list
  - Decide (On UPS / Turn off)
  - (if on UPS) Check On UPS
  - (if turn off) Unplug load
  - (if turn off) Label and zip tie loads to the power supply
  - (if turn off) Turn off and unplug from wall

  Turn on check list
  - (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
  - (if turn off) Plug the load back in

- Off On **Shutter driver [17]**
  Lv1 above 1.0 Cs Raman
  Switch off/on with the switch on the back.

- Off On **New Focus lock box for 1.0 Cs Raman [18]**
  Lv1 above 1.0 Cs Raman

  Turn off check list
  - Unlock
  - Turn down VGA gain
  - Power off from the back

  Turn on check list
  - Power on
  - Make sure PLL setting is restored
  - Turn up VGA gain
  - Lock

- Off On **Timebase drivers for 1.0 Na Raman and Na D2 [19]**
  Lv1 above Thorlabs temp servo
  Record current and T1 settings

Raman Current	
Raman T1	
D2 Current	
D2 T1	

  Turn off check list
  - Turn off output.
  - Check plugged into UPS.

  Turn on check list
  - Turn on

- Off On **Thorlabs temp servo for 1.0 Na Raman doubler [20]**
  Lv1 above 1.0 Na seed
  Record temperature settings

Setpoint	

Turn off check list

– Check On UPS

- Off On **Home lock box for Na D2 [21]**
  Lv1 above 1.0 Na seed
  Turn on-off together with the adjustable high voltage power supply above
  Record high voltage power supply output

Voltage	

Turn off check list

– Unlock
– Turn down the voltage of the high voltage power supply to 0
– Unplug high voltage power on lockbox (zip tie)
– Unplug 15V from lockbox (zip tie)
– Turn off high voltage power supply
– Unplug high voltage power supply from wall

Turn on check list

– Plug high voltage power supply into the wall
– Turn on high voltage power supply (make sure the output is 0)
– Plug in 15V to lockbox
– Plug in high voltage to lockbox
– Turn up the voltage of the high voltage power supply
– Check HV output

- Off On **MPB Raman laser [22]**
  Lv1 above 1.0 Na MOT

Turn off check list

– Power off
– Unplug from wall

Turn on check list

– Plug into wall
– Power on

3 Table

- Off On **PLL for Cs Raman [23]**
  Next to 1.0 Cs Raman

Turn off check list

– Unplug all signals (zip tie together)
– Unplug 15V and 5V powers (zip tie together)

Turn on check list

– Plugin 15V and 5V powers
– Plugin all signals
– Apply settings

4 Floor

- Off On **PLL for Cs MOT [24]**

Below Cs MOT

Turn off check list

- Unplug all signals (zip tie together)
- Unplug 15V and 5V powers (zip tie together)

Turn on check list

- Plugin 15V and 5V powers
- Plugin all signals
- Apply settings

Kenneth

For shutting off, go through the checklist before turning off the computers.

- Turn off equipments
- Turn off computers

Wait before everyone else finish their equipment shutoff before turning off the computers.
For powering up, first turn the computers on before turning on the equipments.

- Turn on computers
- Turn on equipments
- Check computer connection to devices

Also wait before everyone else finish their corresponding steps before starting the next one.

Record settings before turning things off.
All the lasers should be turned off.
All the home built ±15 V, 5V power supplies should be on UPS. 24 V ones are mainly powering amplifiers and can be shut down.
All locks should be disabled.
All temperature controllers should be on UPS and left on.

For each equipment, check if it is in used. Then check the power and make sure if is/should be on UPS. Make sure the "On UPS" label is correct.

Equipments are mostly located around the laser table facing the machine table.

Equipment list

ID	Equipment	Location
Laser table side facing machine table top → down, north side → east side		
1	Benchtop power 1 Chn	Lv2 northwest corner
2	Home power (24)	Lv2 above 623 nm box
3	Benchtop power 2+1 Chn	Lv2 above D1 doubler beam path
4	Benchtop power 1 Chn	Lv2 left of 2 Chn benchtop power
5	FPGA box for 1.0	Lv2
6	Software radio	Lv2
7	High voltage power	Lv2 next to software radio

8	Benchtop power 2+1 Chn	Lv2 next to radio computer
9	Radio computer	Lv2 northeast corner
10	Home temp servo	Lv1 next to oscilloscope
11	Timebase 1038 control box	Lv1 above 623 nm box
12	Till driver v1 (unused)	Lv1 above D1 double beam path
13	Thorlabs temp servo for Na D1 seed	Lv1 above Na D1
14	Thorlabs current for Na D1 seed	Lv1 above Na D1
15	Home temp servo	Lv1 above 976 nm ECDL (Mango)
16	Thorlabs temp servo for Na D1 doubler	Lv1 above Na D1
17	Home lock box for Na D1	Lv1 above Na saturated absorption beam path
18	Shutter driver	Lv1 next to variac
19	Variac for Na cell	Lv1 above 1.0 Na MOT
20	NKT amplifier	Floor northwest corner
21	SFG temp servo	Floor on NKT amplifier
22	Home temp servo	Floor on NKT amplifier
23	Thorlabs current	Floor on NKT amplifier
24	ALS fiber laser	Floor middle of table
25	671 EOM stack	Floor northeast corner

1 Level 2 cloud

- Off On **Benchtop power 1 Chn [1]**

Lv2 northwest corner

Record voltage/current values:

Voltage	Current

Turn off check list

- – ☐ Decide (On UPS / Turn off)
- – ☐ (if on UPS) Check On UPS
- – ☐ (if turn off) Unplug load
- – ☐ (if turn off) Label and zip tie loads to the power supply
- – ☐ (if turn off) Turn off and unplug from wall

Turn on check list

- – ☐ (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- – ☐ (if turn off) Plug the load back in

- Off On **Home power (24) [2]**

Lv2 above 623 nm box

Turn off check list

- – ☐ Decide (On UPS / Turn off)
- – ☐ (if on UPS) Check On UPS
- – ☐ (if turn off) Unplug load
- – ☐ (if turn off) Label and zip tie loads to the power supply
- – ☐ (if turn off) Turn off and unplug from wall

Turn on check list

- – ☐ (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- – ☐ (if turn off) Plug the load back in

- Off On **Benchtop power 2+1 Chn [3]**

Lv2 above D1 doubler beam path

Record voltage/current values:

	Voltage	Current
Left		
Right		

Turn off check list

- ☐ Decide (On UPS / Turn off)
- ☐ (if on UPS) Check On UPS
- ☐ (if turn off) Unplug load
- ☐ (if turn off) Label and zip tie loads to the power supply
- ☐ (if turn off) Turn off and unplug from wall

Turn on check list

- ☐ (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- ☐ (if turn off) Plug the load back in

- Off On **Benchtop power 1 Chn [4]**

Lv2 left of 2 Chn benchtop power

Record voltage/current values:

Voltage	Current

Turn off check list

- ☐ Decide (On UPS / Turn off)
- ☐ (if on UPS) Check On UPS
- ☐ (if turn off) Unplug load
- ☐ (if turn off) Label and zip tie loads to the power supply
- ☐ (if turn off) Turn off and unplug from wall

Turn on check list

- ☐ (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- ☐ (if turn off) Plug the load back in

- Off On **FPGA box for 1.0 [5]**
  Lv2
  Turn off check list
  - (Do following three steps quickly)
  - Turn off the box by flipping the switch on the front side of the box
  - Unplug the high voltage (48V) power supply (circular plug) on the front side of the box. Then unplug the power supply itself fromm the outlet.
  - Unplug the 12V board power supply. (L.T.E. one with a rectangular connector in the front)
  - Unplug USB power on the front side near the fan.
  - Zip tie the three unpluged powers to the computer control box.

  Turn on check list
  - Connect to 3.5G Windfrek clock generator from Tweezer1. Set frequency to 3.5G and amplitude to max.
  - (Remove power connection zip ties and) Plug in USB power supply.
  - (Do following three steps quickly)
  - Plug in the 12V board power supply.
  - Plug in high voltage power supply.
  - Turn on the power switch of the box. The fans should start spinning.

- Off On **Software radio [6]**
  Lv2

  Turn off/on with the switch on the front.

- Off On **High voltage power [7]**
  Lv2 next to software radio

  Follow home lock box for Na D1 [17].

- Off On **Benchtop power 2+1 Chn [8]**
  Lv2 next to radio computer
  Record voltage/current values:

	Voltage	Current
Left		
Right		

  Turn off check list
  - Decide (On UPS / Turn off)
  - (if on UPS) Check On UPS
  - (if turn off) Unplug load
  - (if turn off) Label and zip tie loads to the power supply
  - (if turn off) Turn off and unplug from wall

  Turn on check list
  - (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
  - (if turn off) Plug the load back in

- Off On **Radio computer [9]**
  Lv2 northeast corner

  Ask Yichao

2 Level 1 cloud

- Off On **Home temp servo [10]**
  Lv1 next to oscilloscope

  Turn off check list
  - Check On UPS

- Off On **Timebase 1038 control box [11]**
  Lv1 above 623 nm box

  Should be on UPS and Off.

  Turn off check list

  – ☐
  – ☐

  Turn on check list

  – ☐
  – ☐

- Off On **Till driver v1 (unused) [12]**
  Lv1 above D1 double beam path
  Turn off check list

  – ☐ Check On UPS

- Off On **Thorlabs temp servo for Na D1 seed [13]**
  Lv1 above Na D1
  Record temperature settings

Setpoint	

  Turn off check list

  – ☐ Check On UPS

- Off On **Thorlabs current for Na D1 seed [14]**
  Lv1 above Na D1
  Record current settings

Current	

  Turn off check list

  – ☐ Turn off
  – ☐ Unplug power

  Turn on check list

  – ☐ Plug in power
  – ☐ Check current setting
  – ☐ Turn on

- Off On **Home temp servo [15]**
  Lv1 above 976 nm ECDL (Mango)

  Turn off check list

  – ☐ Check On UPS

- Off On **Thorlabs temp servo for Na D1 doubler [16]**
  Lv1 above Na D1
  Record temperature settings

Setpoint	

  Turn off check list

  – ☐ Check On UPS

- Off On **Home lock box for Na D1 [17]**
  Lv1 above Na saturated absorption beam path
  Turn on-off together with the fixed high voltage power supply above

  Turn off check list
  - Unlock
  - Unplug high voltage power on lockbox (zip tie)
  - Unplug 15V from lockbox (zip tie)
  - Unplug high voltage power supply from walls

  Turn on check list
  - Plug high voltage power supply into the wall
  - Plug in 15V to lockbox
  - Plug in high voltage to lockbox
  - Check HV output

- Off On **Variac for Na cell [19]**
  Lv1 above 1.0 Na MOT
  Record temperature and voltage settings

Voltage	
Temperature 1	
Temperature 2	

  Check if we can use the backup power. (Through the UPS)
  Turn off check list
  - Turn voltage to 0
  - Switch off
  - Unplug from wall

  Turn on check list
  - Plug into wall
  - Switch on
  - Turn the voltage up **SLOWLY** and monitor the temperature at the same time.

- Off On **Shutter driver [18]**
  Lv1 next to variac

  Switch off/on with the switch on the back.

3 Floor

- Off On **NKT amplifier [20]**
  Floor northwest corner
  Record settings,

  Turn off check list
  - Power to 0
  - Turn off
  - Unplug power

  Turn on check list
  - Plug in power
  - Turn on
  - Restore settings

- Off On **SFG temp servo [21]**
  Floor on NKT amplifier

  Turn off.

- Off On **Home temp servo [22]**
  Floor on NKT amplifier

  Turn off check list
  - Check On UPS

- Off On **Thorlabs current [23]**
  Floor on NKT amplifier
  Record current settings

Current	

  Turn off check list
  - Turn off
  - Unplug power

  Turn on check list
  - Plug in power
  - Check current setting
  - Turn on

- Off On **ALS fiber laser [24]**
  Floor middle of table
  Record settings,

  Turn off check list
  - Power to 0
  - Turn off
  - Unplug power

  Turn on check list
  - Plug in power
  - Turn on
  - Restore settings

- Off On **671 EOM stack [25]**
  Floor northeast corner

  Disassemble?

Lewis

For shutting off, go through the checklist before turning off the computers.

- Turn off equipments
- Turn off computers

Wait before everyone else finish their equipment shutoff before turning off the computers.
For powering up, first turn the computers on before turning on the equipments.

- Turn on computers
- Turn on equipments
- Check computer connection to devices

Also wait before everyone else finish their corresponding steps before starting the next one.

Record settings before turning things off.
All the lasers should be turned off.
All the home built ±15 V, 5V power supplies should be on UPS. 24 V ones are mainly powering amplifiers and can be shut down.
All locks should be disabled.
All temperature controllers should be on UPS and left on.

For each equipment, check if it is in used. Then check the power and make sure if is/should be on UPS. Make sure the "On UPS" label is correct.

Equipments are mostly located around the machine table facing the laser table.

Equipment list

ID	Equipment	Location
Machine table facing the laser table top → down, west side → south side		
1	Keithley power (x2)	Lv2 northwest corner
2	Benchtop power 2+1 Chn	Lv2 facing computer
3	Benchtop power 2 Chn	Lv2 above 1.5 Cs MOT/RP current
4	Home power (24) x2	Lv2 next to benchtop power
5	Benchtop power	Lv2 on two home power (24)
6	Home power (±15,5)	Lv2 middle
7	Benchtop power (x2, 1 Chn & 2+1 Chn) for uWave Amp	Lv2 next to home power (±15,5)

8	Benchtop power 1 Chn	Lv2 above uWave breadboard
9	Benchtop power (x2, 1 Chn & 2+1 Chn)	Lv2 southeast corner
10	Function generator for Na switching	Lv1 facing computer
11	Till driver v1 for 1.5 Cs RP	Lv1 above 1.5 Cs
12	Till driver v2 for 1.5 Cs MOT	Lv1 above 1.5 Cs
13	Home temp servo (x2) for 1.5 Cs MOT/RP	Lv1 above 1.5 Cs
14	Home lock box for 1.5 Cs	Lv1 above 1.5 Cs
15	Novatec for 1.5 Cs lock	Lv1 above 1.5 Cs
16	Benchtop power 1 Chn (x2)	Lv1 above 1.5 Na
17	High voltage power	Lv1 next to 2 benchtop power
18	Function generator for 1.0 MOT piezo	Lv1
19	Temperature and pump controllers for cavity	Lv1 next to function generator
20	Power (for Na uWave)	Lv1 next to uWave breadboard
21	SAES pump	Lv1 above 1.0 chamber
22	PLL for 1.5 Cs MOT	Table near 1.5 Cs MOT
23	Controllers for TiSapph (Mercury)	Floor northwest corner
24	Controllers for TiSapph (Venus)	Floor southwest corner
25	Water chiller for uWave breadboard	Floor

1 Level 2 cloud

- Off On **Keithley power (x2) [1]**

Lv2 northwest corner

Record voltage/current values:

	Voltage	Current	UPS	OFF
1				
2				

- Off On **Benchtop power 2+1 Chn [2]**

Lv2 facing computer

Record voltage/current values:

	Voltage	Current
Left		
Right		

Turn off check list

- ☐ Decide (On UPS / Turn off)
- ☐ (if on UPS) Check On UPS
- ☐ (if turn off) Unplug load
- ☐ (if turn off) Label and zip tie loads to the power supply
- ☐ (if turn off) Turn off and unplug from wall

Turn on check list

- ☐ (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- ☐ (if turn off) Plug the load back in

- Off On **Benchtop power 2 Chn [3]**

Lv2 above 1.5 Cs MOT/RP current

Record voltage/current values:

	Voltage	Current
Left		
Right		

Turn off check list

- ☐ Decide (On UPS / Turn off)
- ☐ (if on UPS) Check On UPS
- ☐ (if turn off) Unplug load
- ☐ (if turn off) Label and zip tie loads to the power supply
- ☐ (if turn off) Turn off and unplug from wall

Turn on check list

- ☐ (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- ☐ (if turn off) Plug the load back in

- Off On **Home power (24) x2 [4]**
  Lv2 next to benchtop power

  Turn off check list
  - Decide (On UPS / Turn off)
  - (if on UPS) Check On UPS
  - (if turn off) Unplug load
  - (if turn off) Label and zip tie loads to the power supply
  - (if turn off) Turn off and unplug from wall

  Turn on check list
  - (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
  - (if turn off) Plug the load back in

- Off On **Benchtop power [5]**
  Lv2 on two home power (24)
  Record voltage/current values:

Voltage	Current

  Turn off check list
  - Decide (On UPS / Turn off)
  - (if on UPS) Check On UPS
  - (if turn off) Unplug load
  - (if turn off) Label and zip tie loads to the power supply
  - (if turn off) Turn off and unplug from wall

  Turn on check list
  - (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
  - (if turn off) Plug the load back in

- Off On **Home power (±15,5) [6]**
  Lv2 middle

  Turn off check list
  - Check On UPS

- Off On **Benchtop power (x2, 1 Chn & 2+1 Chn) for uWave Amp [7]**
  Lv2 next to home power (±15,5)
  Record voltage/current values:

	Voltage	Current	UPS	OFF
1				
2 L				
2 R				

Turn off check list

- Decide (On UPS / Turn off)
- (if on UPS) Check On UPS
- (if turn off) Unplug load
- (if turn off) Label and zip tie loads to the power supply
- (if turn off) Turn off and unplug from wall

Turn on check list

- (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- (if turn off) Plug the load back in

- Off On **Benchtop power 1 Chn [8]**
  Lv2 above uWave breadboard
  Record voltage/current values:

Voltage	Current

Turn off check list

- Decide (On UPS / Turn off)
- (if on UPS) Check On UPS
- (if turn off) Unplug load
- (if turn off) Label and zip tie loads to the power supply
- (if turn off) Turn off and unplug from wall

Turn on check list

- (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- (if turn off) Plug the load back in

- Off On **Benchtop power (x2, 1 Chn & 2+1 Chn) [9]**

Lv2 southeast corner

Record voltage/current values:

	Voltage	Current	UPS	OFF
1				
2 L				
2 R				

Turn off check list

- Decide (On UPS / Turn off)
- (if on UPS) Check On UPS
- (if turn off) Unplug load
- (if turn off) Label and zip tie loads to the power supply
- (if turn off) Turn off and unplug from wall

Turn on check list

- (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- (if turn off) Plug the load back in

2 Level 1 cloud

- Off On **Function generator for Na switching [10]**

Lv1 facing computer

Record High, Low, Frequency, Phase, Duty cycle

No. 1 High V	
No. 1 Low V	
No. 1 Frequency	
No. 1 Phase	
No. 1 Duty cycle	
No. 2 High V	
No. 2 Low V	
No. 2 Frequency	
No. 2 Phase	
No. 2 Duty cycle	

Turn off check list

- Check On UPS

- Off On **Till driver v1 for 1.5 Cs RP [11]**
  Lv1 above 1.5 Cs
  Record current values:

Current	

  Turn off check list
  - – Turn off
  - – Unplug power (zip tie to controller)

  Turn on check list
  - – Plug in power
  - – Turn on

- Off On **Till driver v2 for 1.5 Cs MOT [12]**
  Lv1 above 1.5 Cs
  Record current values:

Current	

  Turn off check list
  - – Turn off
  - – Unplug power (zip tie to controller)

  Turn on check list
  - – Plug in power
  - – Turn on

- Off On **Home temp servo (x2) for 1.5 Cs MOT/RP [13]**
  Lv1 above 1.5 Cs
  Turn off check list
  - – Check On UPS

- Off On **Home lock box for 1.5 Cs [14]**
  Lv1 above 1.5 Cs

  Turn off check list
  - – Unlock
  - – Unplug 15V from lockbox (zip tie)

  Turn on check list
  - – Plug in 15V to lockbox

- Off On **Novatec for 1.5 Cs lock [15]**
  Lv1 above 1.5 Cs

  Turn off check list
  - – Save settings

  Turn on check list
  - – Restore settings

- Off On **Benchtop power 1 Chn (x2) [16]**
  Lv1 above 1.5 Na
  Record voltage/current values:

	Voltage	Current	UPS	OFF
1				
2				

  Turn off check list
  - Decide (On UPS / Turn off)
  - (if on UPS) Check On UPS
  - (if turn off) Unplug load
  - (if turn off) Label and zip tie loads to the power supply
  - (if turn off) Turn off and unplug from wall

  Turn on check list
  - (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
  - (if turn off) Plug the load back in

- Off On **High voltage power [17]**
  Lv1 next to 2 benchtop power
  Follow function generator for 1.0 MOT piezo [18].

- Off On **Function generator for 1.0 MOT piezo [18]**
  Lv1

  Turn on-off together with the HV amplifiers for 1.0 piezo mirrors above and the high voltage power supply on the left
  Turn off check list
  - Turn off the function generator
  - Unplug function generator output (zip tie and label)
  - Unplug HV power supply from the wall

  Turn on check list
  - Plugin HV power supply to the wall
  - Plugin function generator output
  - Turn on the function generator

- Off On **Temperature and pump controllers for cavity [19]**
  Lv1 next to function generator

  Check plugged into UPS.

- Off On **Power (for Na uWave) [20]**
  Lv1 next to uWave breadboard

  Unused.

- Off On **SAES pump [21]**
  Lv1 above 1.0 chamber

  Check plugged into UPS.

3 Table

- Off On **PLL for 1.5 Cs MOT [22]**
  Table near 1.5 Cs MOT

  Turn off check list
  - ☐ Unplug all signals (zip tie together)
  - ☐ Unplug 15V and 5V powers (zip tie together)

  Turn on check list
  - ☐ Plugin 15V and 5V powers
  - ☐ Plugin all signals
  - ☐ Apply settings

4 Floor

- Off On **Controllers for TiSapph (Mercury) [23]**
  Floor northwest corner
  Record settings,

Pump power	
Chiller temperature	

  Turn off check list
  - ☐ Standby pump
  - ☐ Pump off, shutter close, unplug from wall
  - ☐ Turn off SolsTis controller (Lv1 facing KRb), unplug from wall
  - ☐ Turn off Chiller, unplug from wall

  Turn on check list
  - ☐ Turn on chiller, restore setting.
  - ☐ Turn on SolsTis controller.
  - ☐ Check wavelength setting (700 nm)
  - ☐ Pump controller on, pump standby.
  - ☐ Pump shutter open. Pump set to original power.

- Off On **Controllers for TiSapph (Venus) [24]**
  Floor southwest corner
  Record settings,

Chiller temperature	
Pump power setpoint	
Pump power reading	
Wavelength setting	

  Turn off check list
  - ☐ Pump power set to 0, shutter close.
  - ☐ Pump cool down (takes a long time)
  - ☐ Pump off, unplug from wall
  - ☐ Turn off SolsTis controller, unplug from wall
  - ☐ Turn off Chiller, unplug from wall

  Turn on check list
  - ☐ Turn on chiller, restore setting.
  - ☐ Turn on SolsTis controller.
  - ☐ Check wavelength setting
  - ☐ Pump controller on, pump warm up (takes a long time).
  - ☐ Pump set to original power.

- Off On **Water chiller for uWave breadboard [25]**
  Floor

  Turn off.

Jessie

For shutting off, go through the checklist before turning off the computers.

- Turn off equipments
- Turn off computers

Wait before everyone else finish their equipment shutoff before turning off the computers.
For powering up, first turn the computers on before turning on the equipments.

- Turn on computers
- Turn on equipments
- Check computer connection to devices

Also wait before everyone else finish their corresponding steps before starting the next one.

Record settings before turning things off.
All the lasers should be turned off.
All the home built ±15 V, 5V power supplies should be on UPS. 24 V ones are mainly powering amplifiers and can be shut down.
All locks should be disabled.
All temperature controllers should be on UPS and left on.

For each equipment, check if it is in used. Then check the power and make sure if is/should be on UPS. Make sure the "On UPS" label is correct.

Equipments are mostly located around machine table facing KRb.

Equipment list

ID	Equipment	Location
Machine table facing KRb top → down, north side		
1	Highest (voltage) power in the lab	Zip tied to you know where it is...
2	Benchtop power 1 Chn	Lv2 northwest corner facing KRb
3	Home power (±15,5)	Lv2 above 1.5 Cs Raman
4	Benchtop power 1 Chn (x2)	Lv2 on home power (±15,5)
5	High voltage power	Lv2 between home power (±15,5) and FPGA box
6	FPGA box for 1.5	Lv2
7	Valan	Lv2 left of FPGA box

8	Home temp servo x3 for STIRAP	Lv2 left of FPGA box
9	Benchtop power (x9, 2+1 Chn x2 & 2 Chn x1 & 1 Chn x6)	Lv2
10	Home power (24)	Lv2 above 1.0 tweezer breadboard
11	Home power (±15,5)	Lv2 on home power (24)
12	Benchtop power 2 Chn	Lv2 northeast corner
13	Keithley multimeter (x2)	Lv2 northeast corner
14	Shutter driver	Lv1 on M2 controller
15	Function generator	Lv1 on shutter driver
16	Home temp servo	Lv1 left of M2 controller
17	Home servo x2 for 1.5 tweezers	Lv1 left of home temp servo
18	Till driver v2	Lv1 above 1.5 Cs Raman beam path
19	Delay generator for 1.5 Na	Lv1 below 1.5 output panel
20	Rack for STIRAP	Lv1 above STIRAP
21	Till driver (x2, v1 & v2) for STIRAP lasers	Lv1 above rack for 1.5
22	Vincent servo x2 for STIRAP lasers	Lv1
23	Home servo x2	Lv1
24	Current servo for compensation coil	Lv1 below home power (24)
25	Greiner servo	Lv1 northeast corner
26	Home temp servo x2 for 1.5 Cs Raman	Floor rack Lv2
27	Piezo driver	Floor rack Lv2 on home temp servo x2
28	Benchtop power 1 Chn	Floor rack Lv2 left of uWave foam
29	Till driver v2 x2 for 1.5 Cs Raman	Floor rack Lv2
30	Home servo for 1.5 Cs Raman phase lock	Floor rack Lv2 above Till drivers
31	Benchtop power 2+1 Chn	Floor rack Lv1
32	Benchtop power 1 Chn	Floor rack Lv1

33	Chiller for 1.0 camera	Floor
34	Benchtop power 1 Chn x 3	Floor STIRAP rack Lv2

1 Level 3 cloud

- Off On **Highest (voltage) power in the lab [1]**
  Zip tied to you know where it is...

2 Level 2 cloud

- Off On **Benchtop power 1 Chn [2]**
  Lv2 northwest corner facing KRb
  Record voltage/current values:

Voltage	Current

Turn off check list

- Decide (On UPS / Turn off)
- (if on UPS) Check On UPS
- (if turn off) Unplug load
- (if turn off) Label and zip tie loads to the power supply
- (if turn off) Turn off and unplug from wall

Turn on check list

- (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- (if turn off) Plug the load back in

- Off On **Home power (±15,5) [3]**
  Lv2 above 1.5 Cs Raman

Turn off check list

- Check On UPS

- Off On **Benchtop power 1 Chn (x2) [4]**
  Lv2 on home power (±15,5)
  Record voltage/current values:

	Voltage	Current	UPS	OFF
1				
2				

Turn off check list

- Decide (On UPS / Turn off)
- (if on UPS) Check On UPS
- (if turn off) Unplug load
- (if turn off) Label and zip tie loads to the power supply
- (if turn off) Turn off and unplug from wall

Turn on check list

- (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- (if turn off) Plug the load back in

- Off On **High voltage power [5]**
  Lv2 between home power (±15,5) and FPGA box

- Off On **FPGA box for 1.5 [6]**
  Lv2
  Save 3.5 GHz amplitude

Amplitude	

Turn off check list

- Save 3.5 GHz amplitude.
- (Do following three steps quickly)
- Turn off the box by flipping the switch on the front side of the box
- Unplug the high voltage (48V) power supply (circular plug) on the left side of the box. Then unplug the power supply itself fromm the outlet.
- Unplug the 12V board power supply. (L.T.E. one with a rectangular connector in the front)
- Unplug USB power on the front side near the fan.
- Zip tie the three unpluged powers to the computer control box.

Turn on check list

- Set 3.5 GHz frequency and amplitude.
- (Remove power connection zip ties and) Plug in USB power supply.
- (Do following three steps quickly)
- Plug in the 12V board power supply.
- Plug in high voltage power supply. The fans should start spinning.
- Turn on the power switch of the box.

- Off On **Valan [7]**
  Lv2 left of FPGA box
  Save frequency and amplitude

	Frequency	Amplitude
Ch 1		
Ch 2		

- Off On **Home temp servo x3 for STI-RAP [8]**
  Lv2 left of FPGA box

Turn off check list

- Check On UPS

- Off On **Benchtop power (x9, 2+1 Chn x2 & 2 Chn x1 & 1 Chn x6) [9]**

Lv2

Record voltage/current values:

	Voltage	Current	UPS	OFF
1 Channel x 6				
1				
2				
3				
4				
5				
6				
2 Channel x 1				
7 L				
7 R				
2+1 Channel x 2				
8 L				
8 R				
9 L				
9 R				

Turn off check list

- Decide (On UPS / Turn off)
- (if on UPS) Check On UPS
- (if turn off) Unplug load
- (if turn off) Label and zip tie loads to the power supply
- (if turn off) Turn off and unplug from wall

Turn on check list

- (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- (if turn off) Plug the load back in

- Off On **Home power (24) [10]**

Lv2 above 1.0 tweezer breadboard

Turn off check list

- Decide (On UPS / Turn off)
- (if on UPS) Check On UPS
- (if turn off) Unplug load
- (if turn off) Label and zip tie loads to the power supply
- (if turn off) Turn off and unplug from wall

Turn on check list

- (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- (if turn off) Plug the load back in

- Off On **Home power (±15,5) [11]**

Lv2 on home power (24)

Turn off check list

- Check On UPS

- Off On **Benchtop power 2 Chn [12]**
  Lv2 northeast corner
  Record voltage/current values:

	Voltage	Current
Left		
Right		

  Turn off check list
  - Decide (On UPS / Turn off)
  - (if on UPS) Check On UPS
  - (if turn off) Unplug load
  - (if turn off) Label and zip tie loads to the power supply
  - (if turn off) Turn off and unplug from wall

  Turn on check list
  - (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
  - (if turn off) Plug the load back in

- Off On **Keithley multimeter (x2) [13]**
  Lv2 northeast corner
  Ask Kenneth

3 Level 1 cloud

- Off On **Shutter driver [14]**
  Lv1 on M2 controller
  Switch off/on with the switch on the back.

- Off On **Function generator [15]**
  Lv1 on shutter driver

  Unused. Remove.

- Off On **Home temp servo [16]**
  Lv1 left of M2 controller
  Turn off check list
  - Check On UPS

- Off On **Home servo x2 for 1.5 tweezers [17]**
  Lv1 left of home temp servo

  Turn off check list
  - Unplug power
  - Tie power to box

  Turn on check list
  - Plug power

- Off On **Till driver v2 [18]**
  Lv1 above 1.5 Cs Raman beam path
  Record current values:

Current	

  Turn off check list
  - Turn off
  - Unplug power (zip tie to controller)

  Turn on check list
  - Plug in power
  - Turn on

- Off On **Delay generator for 1.5 Na [19]**
  Lv1 below 1.5 output panel
  Record current values:

  Turn off check list
  - –
  - –
  - –

  Turn on check list
  - –
  - –
  - –

- Off On **Till driver (x2, v1 & v2) for STIRAP lasers [21]**
  Lv1 above rack for 1.5
  Record current values:

Current 1	
Current 2	

  Turn off check list
  - – Turn off
  - – Unplug power (zip tie to controller)

  Turn on check list
  - – Plug in power
  - – Turn on

- Off On **Rack for STIRAP [20]**
  Lv1 above STIRAP
  Ask Lewis

  Turn off check list
  - –
  - –
  - –

  Turn on check list
  - –
  - –
  - –

- Off On **Vincent servo x2 for STIRAP lasers [22]**
  Lv1
  Ask Lewis

  Turn off check list
  - –
  - –
  - –

  Turn on check list
  - –
  - –
  - –

- Off On **Home servo x2 [23]**
  Lv1

  Turn off check list
  - ☐ Unplug power
  - ☐ Tie power to box

  Turn on check list
  - ☐ Plug power

- Off On **Current servo for compensation coil [24]**
  Lv1 below home power (24)
  Ask Lewis

  Turn off check list
  - ☐
  - ☐
  - ☐

  Turn on check list
  - ☐
  - ☐
  - ☐

- Off On **Greiner servo [25]**
  Lv1 northeast corner

  Turn off check list
  - ☐ Check On UPS

4 Floor

- Off On **Home temp servo x2 for 1.5 Cs Raman [26]**
  Floor rack Lv2

  Turn off check list
  - ☐ Check On UPS

- Off On **Piezo driver [27]**
  Floor rack Lv2 on home temp servo x2

  Check high voltage off/on.

- Off On **Benchtop power 1 Chn [28]**
  Floor rack Lv2 left of uWave foam
  Record voltage/current values:

Voltage	Current

  Turn off check list
  - ☐ Decide (On UPS / Turn off)
  - ☐ (if on UPS) Check On UPS
  - ☐ (if turn off) Unplug load
  - ☐ (if turn off) Label and zip tie loads to the power supply
  - ☐ (if turn off) Turn off and unplug from wall

  Turn on check list
  - ☐ (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
  - ☐ (if turn off) Plug the load back in

- Off On **Till driver v2 x2 for 1.5 Cs Raman [29]**
  Floor rack Lv2
  Record current values:

Current 1	
Current 2	

  Turn off check list
  - Turn off
  - Unplug power (zip tie to controller)

  Turn on check list
  - Plug in power
  - Turn on

- Off On **Benchtop power 2+1 Chn [31]**
  Floor rack Lv1
  Record voltage/current values:

	Voltage	Current
Left		
Right		

  Turn off check list
  - Decide (On UPS / Turn off)
  - (if on UPS) Check On UPS
  - (if turn off) Unplug load
  - (if turn off) Label and zip tie loads to the power supply
  - (if turn off) Turn off and unplug from wall

  Turn on check list
  - (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
  - (if turn off) Plug the load back in

- Off On **Home servo for 1.5 Cs Raman phase lock [30]**
  Floor rack Lv2 above Till drivers

  Turn off check list
  - Unplug power
  - Tie power to box

  Turn on check list
  - Plug power

- Off On **Benchtop power 1 Chn [32]**

Floor rack Lv1
Record voltage/current values:

Voltage	Current

Turn off check list

- – Decide (On UPS / Turn off)
- – (if on UPS) Check On UPS
- – (if turn off) Unplug load
- – (if turn off) Label and zip tie loads to the power supply
- – (if turn off) Turn off and unplug from wall

Turn on check list

- – (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- – (if turn off) Plug the load back in

- Off On **Chiller for 1.0 camera [33]**

Floor
Record temperature setting,

Setpoint	

Turn off check list

- – Turn off camera
- – Turn off chiller
- – Unplug power

Turn on check list

- – Plug power
- – Turn on chiller
- – Turn on camera

- Off On **Benchtop power 1 Chn x 3 [34]**

Floor STIRAP rack Lv2
Record voltage/current values:

	Voltage	Current	UPS	OFF
1				
2				
3				

Turn off check list

- – Decide (On UPS / Turn off)
- – (if on UPS) Check On UPS
- – (if turn off) Unplug load
- – (if turn off) Label and zip tie loads to the power supply
- – (if turn off) Turn off and unplug from wall

Turn on check list

- – (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- – (if turn off) Plug the load back in

Will

For shutting off, go through the checklist before turning off the computers.

- Turn off equipments
- Turn off computers

Wait before everyone else finish their equipment shutoff before turning off the computers.
For powering up, first turn the computers on before turning on the equipments.

- Turn on computers
- Turn on equipments
- Check computer connection to devices

Also wait before everyone else finish their corresponding steps before starting the next one.

Record settings before turning things off.
All the lasers should be turned off.
All the home built ±15 V, 5V power supplies should be on UPS. 24 V ones are mainly powering amplifiers and can be shut down.
All locks should be disabled.
All temperature controllers should be on UPS and left on.

For each equipment, check if it is in used. Then check the power and make sure if is/should be on UPS. Make sure the "On UPS" label is correct.

Equipments are mostly located around 1.5 table.
The power supply on the second floor may need to be shut down first.

Equipment list

ID	Equipment	Location
1.5 Rack		
1	Home power (24)	Bottom level
2	Benchtop power 2 Chn	Above home power (24)
3	SAES pump controller	Middle left
4	Benchtop power 1 Chn x2 for dispensers	Middle next to pump controller
5	Benchtop power 2 Chn for 1.5 coil	Above oscilloscopes
6	Home power (±15,5)	Top level

7	Function generator for 1.5 MOT piezo	Top level on high voltage Amp
Below 1.5 table		
8	IGBT stack	Floor
9	Chiller for 1.5 camera	Floor behind IGBT
10	Benchtop power 1 Chn x 4	Floor between table and drawers
Other		
11	Feshbach power	HVAC room
12	Cooling water	

1 1.5 Rack

- Off On **Home power (24) [1]**

Bottom level

Turn off check list

- Decide (On UPS / Turn off)
- (if on UPS) Check On UPS
- (if turn off) Unplug load
- (if turn off) Label and zip tie loads to the power supply
- (if turn off) Turn off and unplug from wall

Turn on check list

- (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- (if turn off) Plug the load back in

- Off On **Benchtop power 2 Chn [2]**

Above home power (24)

Record voltage/current values:

	Voltage	Current
Left		
Right		

Turn off check list

- Decide (On UPS / Turn off)
- (if on UPS) Check On UPS
- (if turn off) Unplug load
- (if turn off) Label and zip tie loads to the power supply
- (if turn off) Turn off and unplug from wall

Turn on check list

- (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- (if turn off) Plug the load back in

- Off On **SAES pump controller [3]**

Middle left

Turn off check list

- Check On UPS

- Off On **Benchtop power 1 Chn x2 for dispensers [4]**
  Middle next to pump controller

  Turn off check list
  - Decide (On UPS / Turn off)
  - (if on UPS) Check On UPS
  - (if turn off) Unplug load
  - (if turn off) Label and zip tie loads to the power supply
  - (if turn off) Turn off and unplug from wall

  Turn on check list
  - (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
  - (if turn off) Plug the load back in

- Off On **Benchtop power 2 Chn for 1.5 coil [5]**
  Above oscilloscopes
  Record voltage/current values:

	Voltage	Current
Left		
Right		

  Turn off check list
  - Decide (On UPS / Turn off)
  - (if on UPS) Check On UPS
  - (if turn off) Unplug load
  - (if turn off) Label and zip tie loads to the power supply
  - (if turn off) Turn off and unplug from wall

  Turn on check list
  - (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
  - (if turn off) Plug the load back in

- Off On **Home power (±15,5) [6]**
  Top level
  Turn off check list
  - Check On UPS

- Off On **Function generator for 1.5 MOT piezo [7]**

Top level on high voltage Amp
Floor
Record settings,

Frequency	
Amplitude	

Turn off check list

- – Turn off
- – Unplug power

Turn on check list

- – Plug power
- – Turn on

- Off On **Chiller for 1.5 camera [9]**

Floor behind IGBT
Floor
Record temperature setting,

Setpoint	

Turn off check list

- – Turn off camera
- – Turn off chiller
- – Unplug power

Turn on check list

- – Plug power
- – Turn on chiller
- – Turn on camera

2 Below 1.5 table

- Off On **IGBT stack [8]**

Floor
Record settings,

Turn off check list

- –
- –
- –
- –

Turn on check list

- –
- –
- –
- –

- Off On **Benchtop power 1 Chn x 4 [10]**

Floor between table and drawers

Record voltage/current values:

	Voltage	Current	UPS	OFF
1				
2				
3				
4				

Turn off check list

- – ☐ Decide (On UPS / Turn off)
- – ☐ (if on UPS) Check On UPS
- – ☐ (if turn off) Unplug load
- – ☐ (if turn off) Label and zip tie loads to the power supply
- – ☐ (if turn off) Turn off and unplug from wall

Turn on check list

- – ☐ (if turn off) Plug into the wall and turn on the power supply **Do NOT do this with loads pluged in**
- – ☐ (if turn off) Plug the load back in

3 Other

- Off On **Feshbach power [11]**

HVAC room

Record settings,

Voltage	
Current	

Turn off check list

- – ☐ Switch off.
- – ☐
- – ☐

Turn on check list

- – ☐
- – ☐
- – ☐ Make sure water cooling is on.
- – ☐ Switch on.
- – ☐ Restore settings.

- Off On **Cooling water [12]**

Turn off check list

- – ☐ Make sure coil power and IGBTs are off.
- – ☐ Switch off.

Turn on check list

- – ☐ Switch on before turning on coil power.