# **Global Part of Slow-Control System**

## Updates

- Astrid is re-installing all monitoring software (like CS-Studio) for new server (e1039scrun)
- ▷ HDD of UIUC computer (which will be used to launch GUIs at control room) was found broken. Need to get new HDD/SSD and install OS

#### Plans

- Paul/Astrid will confirm all server processes always auto-start properly after e1039scrun reboots
- Kenichi will bring up GUIs at control room
- Hopefully by end of next week

# NMR Computer

- Spec at present
  - Dell XPS 8940
  - ▷ Core i7-10700
  - RAM 16 GB
  - ▷ HDD 1 TB
  - Full-height PCI slots for NI PCIe-8375 interface card
  - Windows 10 Home
  - Any note about installation??
- Preparation for spare
  - Vindows under UVA license
    - bb https://virginia.service-now.com/its/?id=itsweb\_kb\_article&sys\_id=d36122f9db719740f032f1f51d9619f2
    - ▷▷ "Education" (not "Pro")
    - $\triangleright \triangleright$  Valid only for university-owned computer
    - $\triangleright \triangleright$  Valid only when older version is running on computer
  - Will find a similar model at Dell
- Plans
  - Purchase and set up the new computer in December
  - Exchange it with the existing computer
  - $\,\triangleright\,$  Upgrade the existing computer to Pro/Education and keep it as spare

# MKS 615

## Manual:

https://manualzz.com/doc/4458938/

- Basic test @ counting house
  - $\triangleright$  Under atmosphere pressure
  - Sensor = Aluminum cylinder
  - ▷ Preamp = Blue box, MKS 615
  - Controller = MKS 670
- Readout scale
  - Pressure range = 100 Torr
    according to blue-box label
  - Preamp output: 100 Torr = +10 V??
    - Expected by MKS 670



#### Sensor function

- $\triangleright$   $P_X$  = Pressure for measurement
- $\triangleright$   $P_R$  = "Zero" pressure reference, using "built-in" high vacuum
- $\triangleright$  The  $P_R$  cable was disconnected (by time?) and thus resoldered yesterday

## Result

- ▷ MKS 670 showed "OVERRANGE" (13.4 V), reasonable under atmosphere pressure
  - $^{\triangleright \triangleright}$  "UNDERRANGE" (-12.4 V) before  $P_R$  cable was resoldered

## ▶ Plan: Test with low pressure

- $^{\triangleright}$  Cool down the long probe, using LN2
- Expect a low pressure, below 100 Torr

