



# ISU KLM Meeting

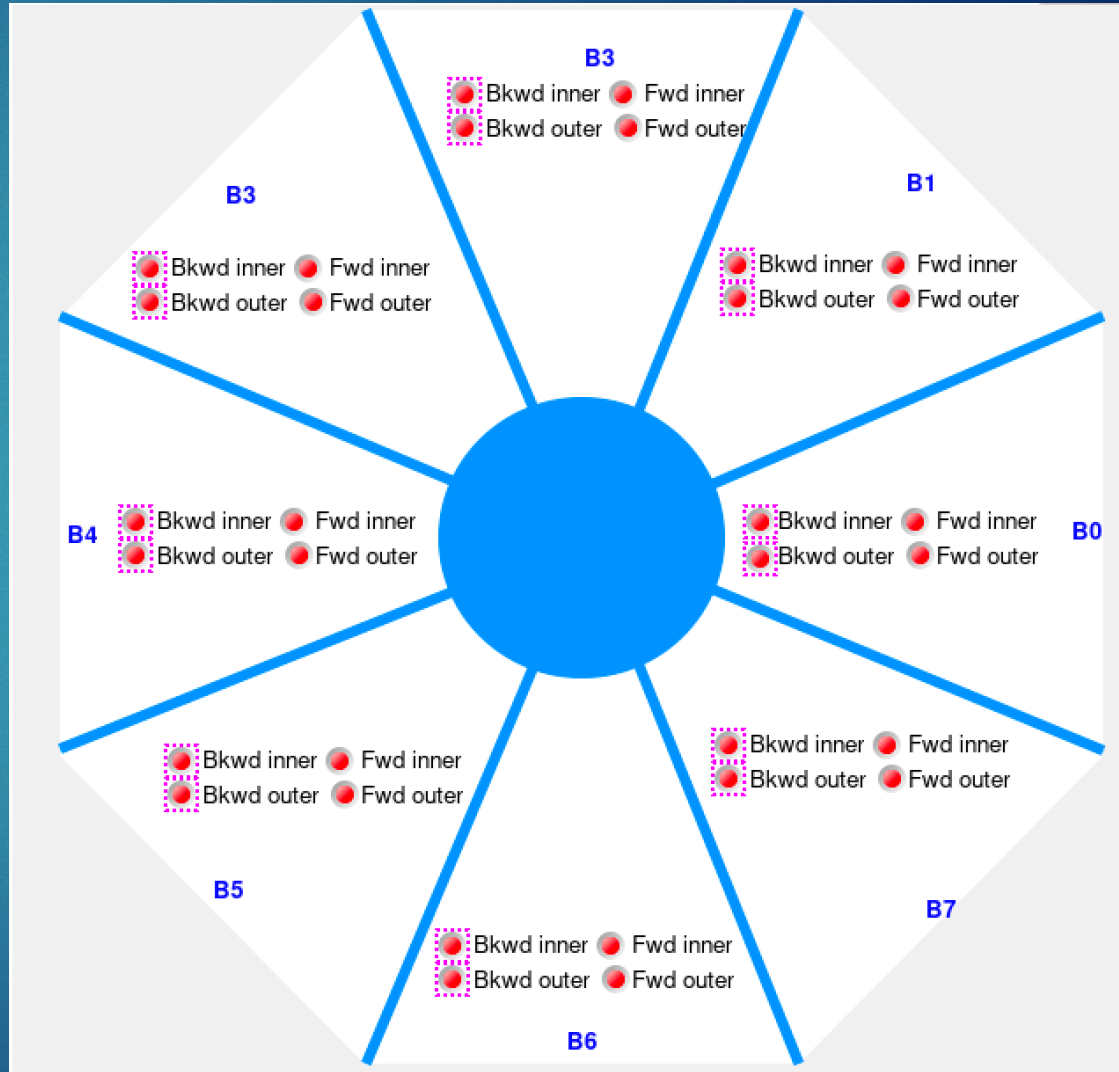
SEPTEMBER 27

NOAH



# GUI update

- ▶ Detector-like layout for homepage of GUI
- ▶ Click on locations to open the panel with more LEDs
- ▶ Each location in the picture on the right (B3 Bkwd inner, B0 Fwd outer, etc.) corresponds to two of the Pi's SPI lanes
  - ▶ I thought it might have been too clustered to include 8 LEDs and labels per sector





# Pi naming and location scheme

- ▶ Proposal: a json file contains location information/instructions
  - ▶ The PV names broadcasted are dependent on the contents of the json file
    - ▶ PV names look like  
"KLM:Bubbler:Sector3:Backward:Outer:Return:Channel22:FlowRate"
  - ▶ In this way, pi locations and PV names can only be changed when a new version of the json file is downloaded from gitlab
    - ▶ Or changed locally on the pi (maybe there is a way to disallow this)
      - ▶ Bash script with chmod or something
  - ▶ json file examples on next slide



# json files for pi naming and location

 **pi\_json.json**  276 B

```
1 {
2   "klmpi2" : {
3     "Sector" : 3,
4     "Direction" : "Backward"
5   },
6   "klmpi4" : {
7     "Sector" : 4,
8     "Direction" : "Backward"
9   },
10  "ax16wc36py7.physics.iastate.edu" : {
11    "Sector" : 3,
12    "Direction" : "Backward"
13  }
14 }
```

 **spi\_json.json**  216 B

```
1 {
2   "0" : { "Side" : "Outer", "Source" : "Supply"},
3   "1" : { "Side" : "Outer", "Source" : "Return"},
4   "3" : { "Side" : "Inner", "Source" : "Supply"},
5   "4" : { "Side" : "Inner", "Source" : "Return"}
6 }
7
```

 **master\_json.json**  1.86 KiB

```
1 {
2   "klmpi2": {
3     "spi0": {
4       "Sector": 3,
5       "Direction": "Backward",
6       "Side": "Outer",
7       "Source": "Supply"
8     },
9     "spi1": {
10      "Sector": 3,
11      "Direction": "Backward",
12      "Side": "Outer",
13      "Source": "Return"
14    },
15    "spi3": {
16      "Sector": 3,
17      "Direction": "Backward",
18      "Side": "Inner",
19      "Source": "Supply"
20    },
21    "spi4": {
22      "Sector": 3,
23      "Direction": "Backward",
24      "Side": "Inner",
25      "Source": "Return"
26    }
27  },
```