

Phoebus Screens for Møller Temperatures

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Phoebus screens are required for monitoring of temperatures and voltages of the Møller experiment's four magnets. The screen made last month has been revised and additional screens made.

It was discovered that the first screen, which used a PDF of a Visio drawing of the coils, became pixelated when enlarged, therefore another drawing method was needed. Lines drawn in Phoebus would be the sharpest, but Phoebus drawing tools make it difficult to create beyond basic shapes. So the drawing was made in AutoCAD and the line properties from AutoCAD were used to make lines and arcs in Phoebus. However, due to number rounding in Phoebus, lines did not connect properly in Phoebus. The next attempt used Illustrator.

After testing various properties in creating an Illustrator drawing and in saving it as another format, Illustrator was found to be satisfactory for making Phoebus screen drawings.

Twelve screens have been made for Møller magnets 1, 2, 3, and 4—four to display temperatures, four to display voltages using a diagram, and four to display voltages as a list. Figure 1 shows a screenshot of the revised magnet 2 temperature screen, Fig. 2 the voltages of magnet 4 using a diagram, and Fig. 3 voltages of magnet 4 using a list.

- **Created Phoebus monitoring screens for Møller magnets**
- **Four screens made to display temperatures**
- **Eight screens made to display voltages, four with a diagram and four as a list**

Phoebus Screens for Møller Temperatures

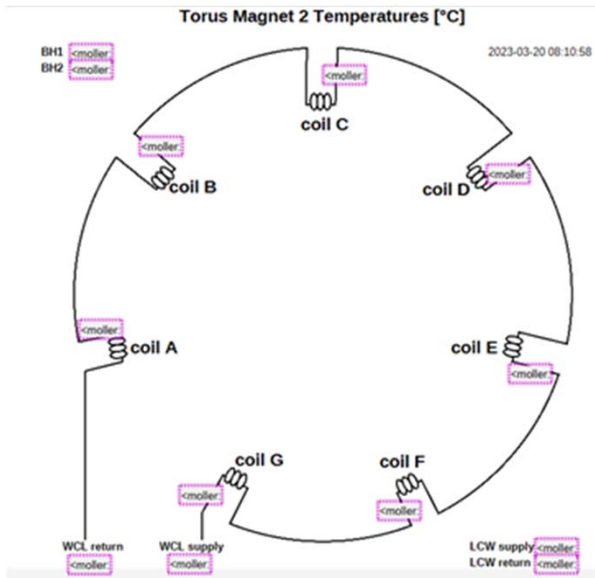


FIG. 1. Screenshot of magnet 2 temperatures.

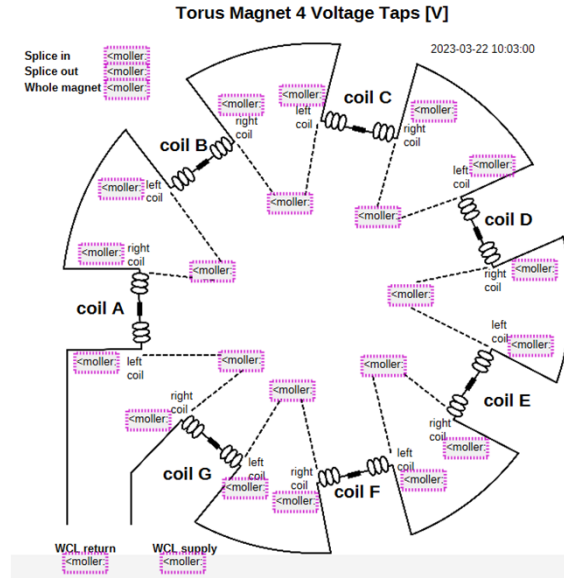


FIG. 2. Screenshot of magnet 4 voltages, with diagram.

Torus Magnet 4 Voltage Taps [V]

2023-03-22 10:03:54

- Splice in
- Splice out
- WCL supply
- WCL return
- Whole magnet
- Coil A left
- Coil A right
- Coil B left
- Coil B right
- Coil C left
- Coil C right
- Coil D left
- Coil D right
- Coil E left
- Coil E right
- Coil F left
- Coil F right
- Coil G left
- Coil G right
- Coil A-B
- Coil B-C
- Coil C-D
- Coil D-E
- Coil E-F
- Coil F-G
- Coil G-A

FIG. 3. Screenshot of magnet 4 voltages as list.