Contribution ID: **30** Type: **20-minute talk**

Moving on from VME without Breaking the Bank

Tuesday, 25 April 2023 13:40 (20 minutes)

Most APS beamlines are using VME crates as a major part of their control system.
The VME hardware is expensive and becoming obsolete, with replacements for many of the above items no longer available. The VxWorks software is also expensive.

I am leading an effort at sector 13 to completely eliminate the 7 VME systems during the dark year.

I plan to install the following to replace the VME systems:
• Galil DMC-4183 motor controllers to replace the OMS-58 and MAXv.
• Moxa terminal servers to replace the VME serial communication modules.
• Measurement Computing USB-CTR08 to replace the Joerger and SIS 3820 scalers and multi-channel scaler functions.
• Measurement Computing USB-3104 to replace the DAC128V for analog output.
• Measurement Computing USB-1808X to replace the IP-330.

The total hardware cost to replace 7 VME systems for 2 FOEs and 5 experimentation stations is less than $150K. This includes more than 370 motor channels.

Please select if talk will be in person or on zoom

In person

Primary author: RIVERS, Mark (Univ. of Chicago)

Presenter: RIVERS, Mark (Univ. of Chicago)

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