

## **NEXT GENERATION EPICS COMMUNICATION PROTOCOLS**

J.O. Hill, LANL

The communications protocols utilised in the Experimental Physics and Industrial Control System (EPICS) have been in use, essentially unchanged, for more than 10 years. With more than 100 EPICS sites world-wide, there is increasing justification for performance and functional upgrades, but with a paramount requirement to remain backward compatible with the existing user base. The future viability of EPICS requires that it keep up with advances in computer and communication technology. To this end, a number of improvements have been proposed for next generation EPICS protocols. This paper describes the proposed changes and their benefits, as well as a strategy for implementing these changes, while allowing uneventful upgrades for the large number of installed systems.