DEVELOPMENT OF A HARDWARE CONTROLS SYSTEM FOR THE STAR EXPERIMENT

M. Cherney, Creighton University - Representing The Star Collaboration

* This work was supported by the Office of Science of the U.S. Department of Energy under grant DE-FG03-96ER40991.

A controls system has been designed and implemented for the STARexperiment at RHIC. Approximately 10000 parameters governing experimentoperation are currently monitored. The system uses the ExperimentalPhysics and Industrial Control System (EPICS) as well as STAR-specificsoftware. The architecture of STAR hardware controls (including anexperiment-wide control bus / data access path) will be presented. Systemdevelopment will be discussed in terms of the significant fraction of theproject which was carried out by undergraduate students using prepackagedsoftware tools. The results of operation of the integrated baselinesystem will be summarized.