

PC –BASED TECHNOLOGIES FOR DIAGNOSTICS, MEASUREMENT AND CONTROL

J. T. Truchard, K. Schultz, National Instruments, Austin

Abstract

Over the years, the use of COTS technology has enabled scientists and researchers to focus on their experiments rather than the instrumentation. COTS systems that leverage the rapid advancement in the computer industry for measurement and control needs provides high performance and flexibility while keeping the costs low. This presentation will focus on the various models of computation that allows for rapid application development, multicore and FPGA technologies for instrumentation and interoperability between software and hardware platforms. Adoption of COTS technology at different labs such as CERN, ESO and Los Alamos National Labs will also be covered.

PRESENTATION ONLY