What is SLAC’s software toolkit of choice used for controlling LCLS, SPEAR, ...?

Answer: Experimental Physics and Industrial Control System (EPICS).

You can find its home here: http://www.aps.anl.gov/epics/, which states “EPICS is a set of Open Source software tools, libraries and applications developed collaboratively and used worldwide to create distributed soft real-time control systems for scientific instruments such as particle accelerators, telescopes and other large scientific experiments.” For SLAC, EPICS provides a distributed low-level architecture to facilitate rapid development, scalability, robustness, and reliability for systems across the laboratory. As SLAC continues to build new facilities and accelerators, migrate legacy systems, and hire new scientific staff, EPICS training becomes more and more important.

The SLAC Controls Department is offering a four day course on EPICS next month, June 22-25, 2010. Due to class size constraints we will offer additional classes to accommodate the demand. Please refer to the following link for schedule and class syllabus.

Presented by the SLAC Controls Department in collaboration with the Lawrence Berkeley National Laboratory

EPICS Class Overview

- Tues 6/22: Introduction to EPICS
  09:00-17:00 Madrone Room, Building 48
  Instructor: Steve Lewis of SLAC

- Wed. 6/23: EPICS Basics
  09:00-17:00 Madrone Room, Building 48
  Instructor: Steve Lewis of SLAC

- Thurs 6/24: Intro to RTEMS Programming and RTOS Concepts
  09:00-17:00 Conference Room, Building 34
  Instructor: Eric Norum of LBNL

- Fri 6/25: EPICS Device Support
  09:00-17:00 Conference Room, Building 34
  Instructor: Stephanie Allison of SLAC