

## WAO'18: Workshop on Accelerator Operations



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### A Tour of Aging Systems at SLAC

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The linear accelerator at the SLAC National Accelerator Laboratory has produced electron beams since 1967. Over the years, there have been many generations of upgrades, additions, removals, and reconfigurations of both the accelerator hardware and control system, but never a complete tear-down and replacement of the accelerator - bits and pieces of every generation of SLAC equipment remain in use today. These systems present many interesting challenges for accelerator operators: reliability is often low, operating the equipment depends on user interfaces that are unfamiliar. Most importantly, understanding how and why the systems work depends on understanding their history, even though many of those historical building blocks are no longer in use. This presentation will give a guided tour through some of these systems, the frustrations they cause, and tools that operators have developed to make the systems easier to operate.

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