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Controls Interfaces for Two ALICE Subsystems¹ ROBERT THOMEN, Creighton University — Software for the control of a laser alignment system for the Inner Tacking System (ITS) and for the Electromagnetic Calorimeter (EMC) was developed for the ALICE (A Large Ion Collider Experiment) at CERN. The interfaces for both subsystems use the CERN-standard hardware controls system PVSS (Prozessvisualisierungs- und Steuerungs-System). Software for the ITS has been created to measure the relative alignment of the ITS with the Time Projection Chamber (TPC) so to ensure accurate particle tracking. The ITS alignment system locates laser images in four cameras. The EMC requires several subsystems to be running in order to operate properly. Software has been created and tested for the detector's high and low voltage systems, and temperature monitoring hardware. The ITS and EMC software specifications and design requirements are presented and their performance is analyzed.

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