

**The Design of the FERMI Personnel Access Control and Interlock System**, L. BARBINA, D. BULFONE, S. GRULJA, P. MICHELINI, F. RADOVCIC, C. SCAFURI, A. VASCOTTO, Sincrotrone Trieste, Padriciano 99, 34012 Trieste, Italy - FERMI is the proposed IR/FIR FEL user facility in Trieste, Italy. The electron beam is supplied by the first 100 MeV part of the ELETTRA injector linac and transferred via a transfer line into the FEL hall which is close to the linac tunnel. The personnel access interlock and control system protects personnel against radiation hazards induced by linac or FEL operation and regulates the access to the FEL hall. After a discussion of the technical choices which have been driven by fail-safe and redundancy criteria, the system architecture is presented.