

**Design and Development of a New Control System for the ELETTRA Linac,** L. BARBINA, D. BULFONE, M. LONZA, R. MARIZZA, P. MICHELINI, Sincrotrone Trieste, Padriciano 99, 34012 Trieste, Italy - The injection system of ELETTRA relies on a high energy linac which has been bought as a turn-key machine. The low level of reliability and flexibility of the original control system has led to the decision to completely redesign and integrate it with the ELETTRA control system, which has proven high efficiency in the first two years of operation. The paper describes the new software and hardware architecture developed and the experience gained by interfacing the existing equipment.