

**Accelerator Control for the GSI Cancer Therapy Project,** H. EICKHOFF, TH. HABERER, R. STEINER - At the Heavy Ion Research Institute GSI in Darmstadt an experimental cancer treatment program has started. A new method for cancer treatment with ions has been developed, using rasterscan method in addition to an active pulse to pulse variation of ion beam properties from the synchrotron, including the energy, intensity and focusing. An overview of the accelerator aspects to fulfill the requirements of this project is presented, that covers the modifications to provide the required beam variations on a pulse to pulse base. In addition to a description of the technical design for the controls hardware and software experimental results of the achieved beam properties will be presented.