

**Results Concerning the New Control System of the Vivitron based on an Object Oriented Database,** R. BAUMANN, T. DIAZ, A. JBIL, E. KAPPS, R. KNAEBEL, N. LAHERA, J.C. MARSAUDON, L. MICHEL, J. PERSIGNY, G. PREVOT, Y. STAMM, IReS, Strasbourg - Since January 1997, the new control system software of the Vivitron has been successfully installed. Thirteen VME crates working at potentials from 0 to 20 MV concentrate the measurements and the commands. They are all linked together and to 4 display workstations, by a private optical Ethernet network. The challenge has been to handle and display 1500 parameters at the same time, with a fast and accurate rendering for the user. Other features like online archiving and fast momentaneous sampling (up to 1000HZ) were added to allow precise diagnostics. Another important point of this control system is its maintenance tool. An object oriented database has been used to handle all the parameters descriptions and to generate the code. Every change is easily done by a non specialist by changing or adding a parameter, the code being automatically generated and loaded to the target crate by the database. The performance of the object code generator and the use of standard hardware allow us to export it easily to other accelerators. We already used it to control the electrostatic accelerator CN of the IReS.