

An Archive System for PETRA, W. SCHÜTTE,
DESY - A new, PC based control system is being introduced for the high energy particle accelerator PETRA. All relevant data for the operation and control of the accelerator is send with standardized IPX calls. Any subset of those data can be stored with an archive system at a rate of up to one Hertz. Archivation can be done at certain time intervals and/or on a specified relative/absolute value change and/or for values within a specific range. Archivation can be made dependent on the state of the accelerator like injection and of the accelerated particle type. An example would be to store the values of the proton injection orbit, which differed from the last stored injection value by at least 0.5 mm, or to store the vacuum values which changed by at least 50%. The definition of the archivation is completely given by entries in a database. Archiving can be done in quasi infinite tables or on a first in first out basis in tables of a defined depth. Both the definition of archiving and the archiving itself is done with Microsoft Access 2.0[®] as a database. We are starting to touch the limits and contemplate on Access 7.0 and on a client server database on Windows NT.