

Fast and Flexible BPM-System: Valuable Commissioning Tool for the BESSY II Booster Synchrotron*, R. BAKKER, F. FALKENSTERN, R. GOERGEN, P. KUSKE, R. MUELLER, E. WEIHRETER, BESSY - The BESSY II injector BPM system is based on processing the 4 pick-up signals of one sensor in parallel, however in succession around the accelerator or along the transfer lines. Sophisticated data handling software running on a VME board computer in the EPICS context gives access to measured data in a large variety of modes. During acceleration, beam orbits can be measured in 256 time bins of 200 us width. BPM based measurements like the determination of orbit deviations as a function of energy and the accurate matching of the extraction bump have demonstrated the relevance of this diagnostic tool for machine commissioning.

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