

**Beam Position Monitor with the Digital Signal Processing.** A. BATRAKOV, T. BOLSHAKOV, A. KALININ, E. LEVICHEV, V. SAJAEV, V. SHILO, V. SMALUK, BINP; S. KUZNETSOV, KSRS - A new electronics for beam position monitor which was developed and tested at VEPP-4M storage ring is described. A single module includes 4-channel ADC and DSP TMS320C31 that can be connected via serial data link with a central processor board. 10 bits ADCs are simultaneously synchronized and have maximum sample rate 15 MSPS. The DSP provides the possibility of digital processing of information according to the algorithms loaded from the central processor. Specifications of several operation modes and their examples at the beam of VEPP-4M are presented.