

Coherent Synchrotron Oscillation Excited by a Ripple of a Klystron Power Supply, M. HARA, T. NAKAMURA, T. OHSHIMA, T. TAKASHIMA, SPRING-8 - Coherent synchrotron oscillation was observed in the SPring-8 storage ring as sidebands at the harmonics of the accelerating frequency, which is independent of beam current. This is explained using a forced oscillation model of the synchrotron oscillation by the disturbance of accelerating voltage. The RF disturbance is induced by the ripple noise in the klystron cathode voltage at the harmonics of the frequency of the AC power supply.