

**Tune Value Evaluation for Combined Function Lattice,** Y. IWASHITA, A. MORITA, A. NODA, NSRF, ICR, Kyoto University - On a compact synchrotron with combined function lattice, a tune value evaluated by the conventional method may not be accurate, because the dipole and the quadrupole components decays differently in fringing region, which is difficult to be considered in the conventional method. Thus, a tune value was evaluated by following method; (1) a magnetic field distribution was calculated by TOSCA, (2) particles in the magnetic field were tracked, (3) a transfer matrix was constructed to express a linear transformation between the phase spaces at the entrance and the exit, and (4) the tune value was evaluated from the obtained transfer matrix.