

**Beam Current Limitation due to Single-Beam Collective Effects in the Ion Storage Ring of RIKEN RI-Beam Factory Project**, T. KATAYAMA, INS; M. TAKANAKA, RIKEN - Single-beam collective effects limit the current or the luminosity of ion beams used for electron-ion colliding experiments in the ring. The lattice of the ring has been being optimized in the step of design. Here, the limitation is evaluated for the updated version of the design. The capability to increase the luminosity is investigated by revising the design.