

**The Present Status of the KEKB Project,**  
S. KUROKAWA, KEK, National Laboratory For High Energy Physics - A two-ring, electron positron, asymmetric-energy B-factory, KEKB, housed in a 3000 m circumference tunnel is being constructed at KEK and to be completed in 1998. The 8-GeV electron ring and the 3.5-GeV positron ring intersect at one point, where electrons and positrons collide at a finite angle of  $\pm 11$  mrad. Belle detector surrounds this point. The luminosity of the machine,  $1 \times 10^{34} \text{ cm}^{-2} \text{ s}^{-1}$ , requires large stored currents (1.1 A for electrons and 2.6 A for positrons) distributed into 5000 bunches in each ring, and small  $\beta$ -value at the colliding point in the vertical direction (1 cm). Strong coupled-bunch instabilities are mitigated by the use of HOM-free accelerating cavities (normal conducting ARES cavities and superconducting single-cell, single-mode cavities) and by bunch-by-bunch feedback systems. Superconducting crab cavities are being developed to suppress synchro-betatron resonances excited by the finite-angle crossing.