

Diagnosis of the Low Emittance Beam in ATF DR Extraction Line, S. KASHIWAGI, The Graduate University for Advanced Studies; H. HAYANO, K. KUBO, N. TERUNUMA, N. TOGE, J. URAKAWA, KEK; T. OKUGI, Tokyo Metropolitan University; D. MCCORMICK, M. ROSS, SLAC - The ATF damping ring has been designed to produce the low emittance beam required by future linear colliders. In the design, the normalized vertical emittance of the ATF damping ring is $3.0\text{E-}8$ radm which corresponds to the vertical beam size of about 10 micron in the extraction line. The emittance of the beam extracted from the ATF damping ring is measured with four wire scanners located in a dispersion free region of the extraction line. The optics of the extraction line is also studied. We will report the method and the result of the emittance measurement.