

A Measurement of Vertical Beam Size of the ATF Damping Ring by the Use of SR-Interferometer,
T. MITSUHASHI, T. NAITO, KEK - A vertical beam size of the ATF damping ring was measured by the use of SR-Interferometer. Visibility of the interferogram was measured with polarized (select the sigma component) quasi-monochromatic (wavelength is 500 nm) SR beam. The result of least square analysis of visibility by assuming a Gaussian beam profile, the vertical beam size was 16.9 μm . With a value of measured beta-function, corresponding vertical emittance was 100 pmrad. The interferogram taken by the SR-Interferometer is used as qualitative emittance monitor for tuning of the ring.