

Dynamic Aperture Studies for SRRC Storage Ring with Gaussian Sextupoles, J.C. LEE, SRRC; H. WIEDEMANN, SSRL - In an attempt to maximize the dynamic aperture at the SRRC storage ring the effect of Gaussian sextupoles were studied to replace the normal sextupole families. In Gaussian sextupoles the fields are partially truncated at large distance from the axis to reduce destabilizing, nonlinear effects on particles with large betatron oscillation amplitudes. The results of these studies will be described including the improvement on the dynamic aperture for on-momentum particles in an unperturbed lattice. Furthermore, tracking results in the presence of magnet multipole errors will be presented as well as those involving tracking of off-energy particles.