

Lifetime Calculations for the LSB Storage Ring,
F. PÉREZ, M.J. VICENTE, LSB, Barcelona, Spain - A total lifetime of more than 24 hours has to be achieved in order to assure a good performance for the LSB Light Source. There are two main processes contributing to the overall lifetime: the beam residual gas scattering and the Touschek scattering. The beam residual gas lifetime is determined mainly by Coulomb and Bremsstrahlung scattering on the nuclei of the residual gas. An analysis of the contribution of each of these processes as a function of the vacuum pressure, the composition of the residual gas, the physical acceptance and the momentum acceptance will be presented. Later on the effect of the introduction of Insertion Devices with small gap in the Storage Ring will be analysed.