

**Impedances and Power Losses for an Off-Axis Beam**, S. KURENNOY, Univ. of Maryland, USA - A method for calculating coupling impedances and power losses for off-axis beams is developed. It is applied to calculate impedances of small localized discontinuities like holes and slots, as well as the impedance due to a finite resistivity of chamber walls, in homogeneous chambers with an arbitrary shape of the chamber cross section. The approach requires to solve a two-dimensional electrostatic problem, which can be easily done numerically in the general case, while for some particular cases analytical solutions are obtained. Analytical and numerical results are presented for a few simple cross sections.