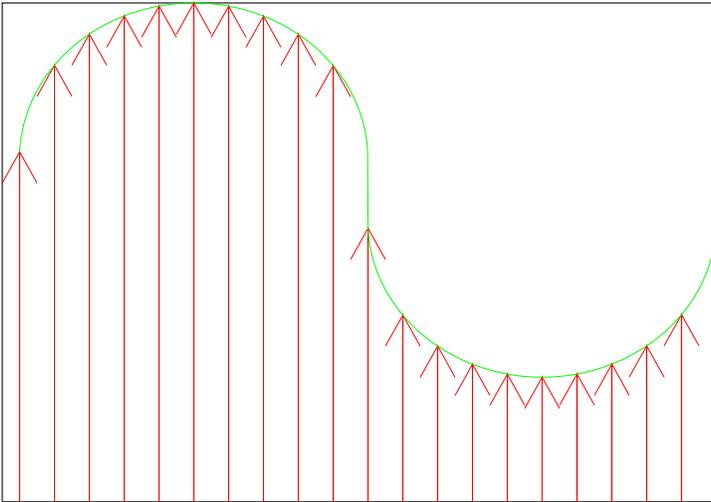


# Enhanced Secondary Emission in Bellows

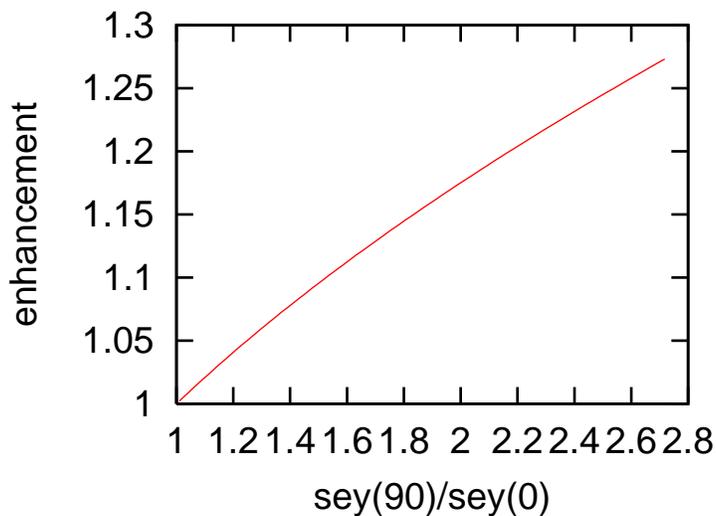
M. Blaskiewicz - BNL

Kirby-Bruining Formula  $SEY(\theta) = SEY(0) \exp[\alpha x_m(1 - \cos \theta)]$

Assume semicircular corrugations and radial electron flow



$$\text{Average over one period. enhancement} = \int_0^P \frac{dz}{P} \exp[\alpha x_m(1 - \cos \theta(z))]$$



For TiN on Al,  $SEY(90^\circ) \approx 2 \times SEY(0^\circ)$  On average an SEY of 1.3 goes to 1.5  
Negligible, compared with the effect of pumping ports and other unshieldable areas.