
Plattner et al. Vol. 139, No. 7, December 1997. Pages 1709–1717.

Underlined portions of the text below represent corrected symbols that appeared in the derivation of equation 2 on p. 1711.

Assume that the centers of granules are distributed randomly and uniformly over the cell volume, except for those regions in which steric hindrance does not allow the presence of a granule larger than a certain diameter because of overlap with the cell boundary. Then the probability $\underline{p}_\rho(d)$ to find the center of a granule of radius ρ at a distance d from the boundary of a cell with radius \underline{r}_0 is given by

$$p_\rho(d) = \begin{cases} 0 & \text{for } d < \rho \\ \text{const} \cdot 4\pi(r_0 - d)^2 & \text{for } d > \rho \end{cases} \quad (1)$$

where $4\pi(r_0 - d)^2 dr$ is the volume of a shell of width dr at distance $(r_0 - d)$ from the center of the cell.