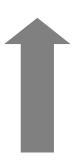
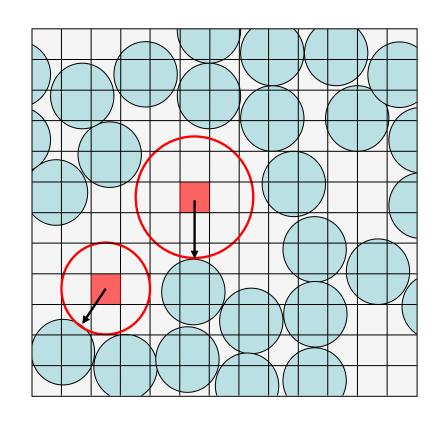
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$$R_{void} = \begin{vmatrix} \vec{r}_{dV} - \vec{r}_{sphere} \end{vmatrix} - R_{sphere}$$

$$V_{void} = VV = \frac{4}{3} \pi R_{void}^{3}$$





Unoccupied space is divided in small *dV* (red squares) and the distance to the nearest particle is calculated. The corresponding void volume *(VV)* is depicted with the red circles.

Generally:

$$dV \ll R_{void}^3$$