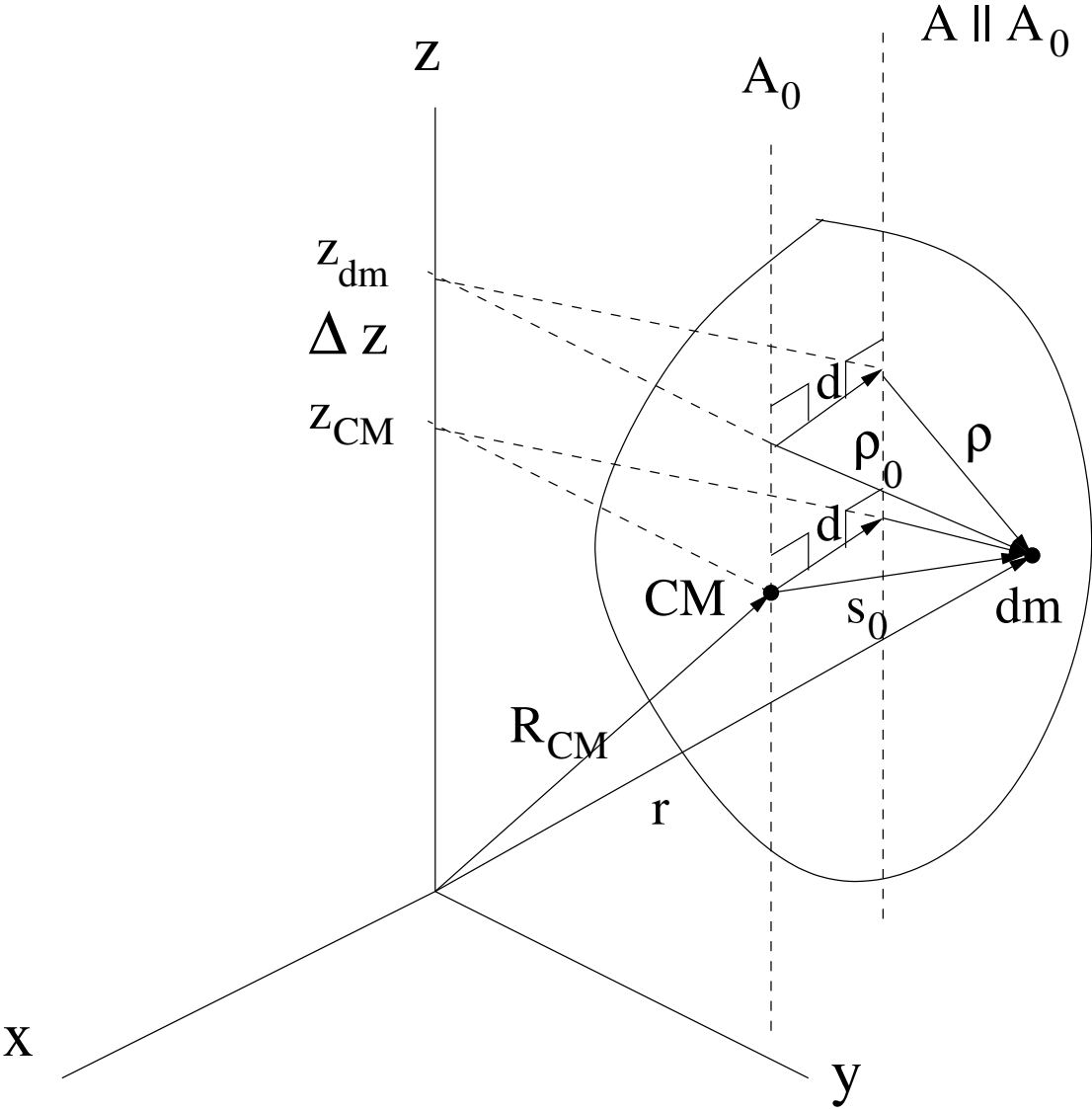




$$\rho_0 = d + \rho$$

$$\mathbf{r} = \mathbf{R}_{CM} + \mathbf{s}_0$$

$$= \mathbf{R}_{CM} + \Delta z \hat{\mathbf{z}} + \rho_0$$