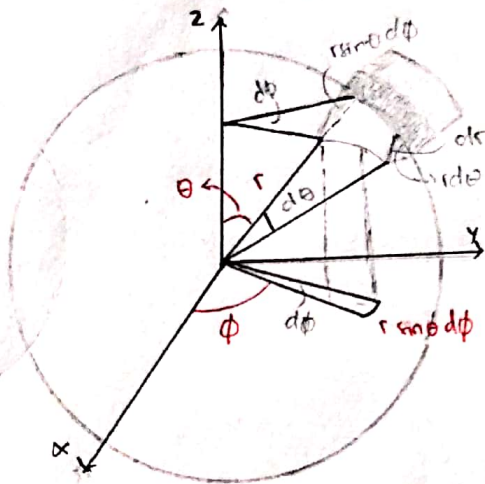


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$$\begin{aligned}x &= r \sin \theta \cos \phi \\y &= r \sin \theta \sin \phi \\z &= r \cos \theta \\dv &= r^2 \sin \theta \, dr \, d\theta \, d\phi\end{aligned}$$

Luar :

$$\begin{aligned}ds &= p \times l \\&= r \sin \theta \, d\phi \cdot r \, d\theta \\&= r^2 \sin \theta \, d\theta \, d\phi\end{aligned}$$

Volume:

$$\begin{aligned}dV &= p \times l \times t \\dV &= dr \cdot r \, d\theta \cdot r \sin \theta \, d\phi \\dV &= r^2 \sin \theta \, dr \, d\theta \, d\phi \\dV &= r^2 \sin \theta \, dr \, d\theta \, d\phi\end{aligned}$$

Lintang:

$$dr^2 = dr^2 + r^2 d\theta^2 + r^2 \sin^2 \theta \, d\phi^2$$

$$\text{Gradien: } \nabla t = \hat{r} \left(\frac{\partial t}{\partial r} \right) + \hat{\theta} \left(\frac{1}{r} \frac{\partial t}{\partial \theta} \right) + \hat{\phi} \left(\frac{1}{r \sin \theta} \frac{\partial t}{\partial \phi} \right)$$