

$\Lambda = V_u$ is volume.

$$\text{So (6.88)} \Rightarrow \mathbb{E}[(2yu^3n)^{1/2}] =$$

$$\text{Hence} \Rightarrow \mathbb{E}y = \frac{1}{2yu^3}$$

$$= \frac{2\pi}{|A|^{1/2} 4u^{3/2}}$$

$$\boxed{\mathbb{E}S_u = \cancel{u} \frac{2\pi}{|A|^{1/2} u^2}}$$

W^{-D}

$$\Lambda = \frac{1}{FWHM}$$

$$|A| = (4\log(2))^D \frac{1}{(FWHM)^{2D}}$$

$$\boxed{|A|^{1/2} = (4\log(2))^{D/2} \frac{1}{FWHM^D}}$$