$$\lambda_{\rm obs} \quad = \quad \lambda_{\rm source}\,\frac{\sqrt{1+\beta}}{\sqrt{1-\beta}} \qquad = \qquad \lambda_{\rm source}\,\frac{\sqrt{1+(v/c)}}{\sqrt{1-(v/c)}}$$

$$\lambda_{\rm obs} \quad \simeq \quad \lambda_{\rm source}\,(1+\beta) \qquad = \qquad \lambda_{\rm source}\,(1+(v/c))$$

$$\text{velocity (km/s)} \quad = \quad H \ \text{distance (Mpc)}$$

$$z \quad = \quad \frac{\lambda_{\rm obs}}{\lambda_{\rm source}} - 1$$

$$\beta \quad \equiv \quad \frac{v}{c}$$