

## EFFETTO DOPPLER n° 79 pg 514

$$f_{\text{source}} = 1250 \text{ Hz}$$

$$f_{\text{ric}} = 1290 \text{ Hz}$$

$$v = 343 \frac{\text{m}}{\text{s}}$$

$\uparrow$   
ric



### SORG. IN AVVICINAMENTO

$$f_{\text{ric}} = f_{\text{source}} \frac{1}{1 - \frac{v_{\text{source}}}{v}} = f_{\text{source}} \frac{v}{v - v_{\text{source}}}$$

$$v - v_{\text{source}} = \frac{f_{\text{source}} \cdot v}{f_{\text{ric}}}$$

$$+ v_{\text{source}} = - \frac{f_{\text{source}}}{f_{\text{ric}}} v + v$$

$$v_{\text{source}} = v \left( 1 - \frac{f_{\text{source}}}{f_{\text{ric}}} \right) = 343 \frac{\text{m}}{\text{s}} \left( 1 - \frac{1250 \text{ Hz}}{1290 \text{ Hz}} \right) =$$

$$= 10,64 \frac{\text{m}}{\text{s}} \quad \left( \approx 39,28 \frac{\text{km}}{\text{h}} \right)$$