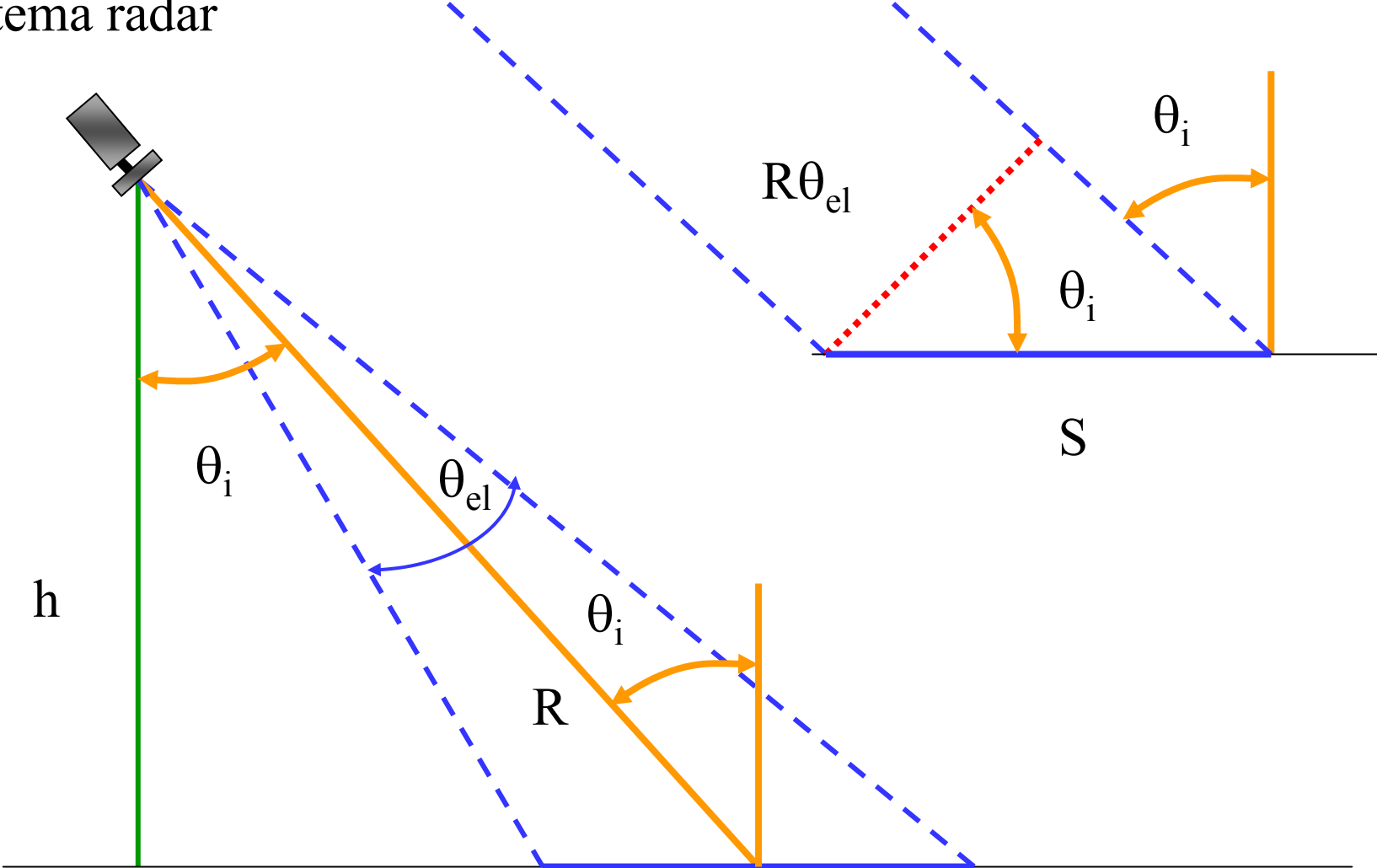


Figura 8.1

Sistema radar



$$S = h\theta_{el}/\cos\theta_i$$

Figura 8.2

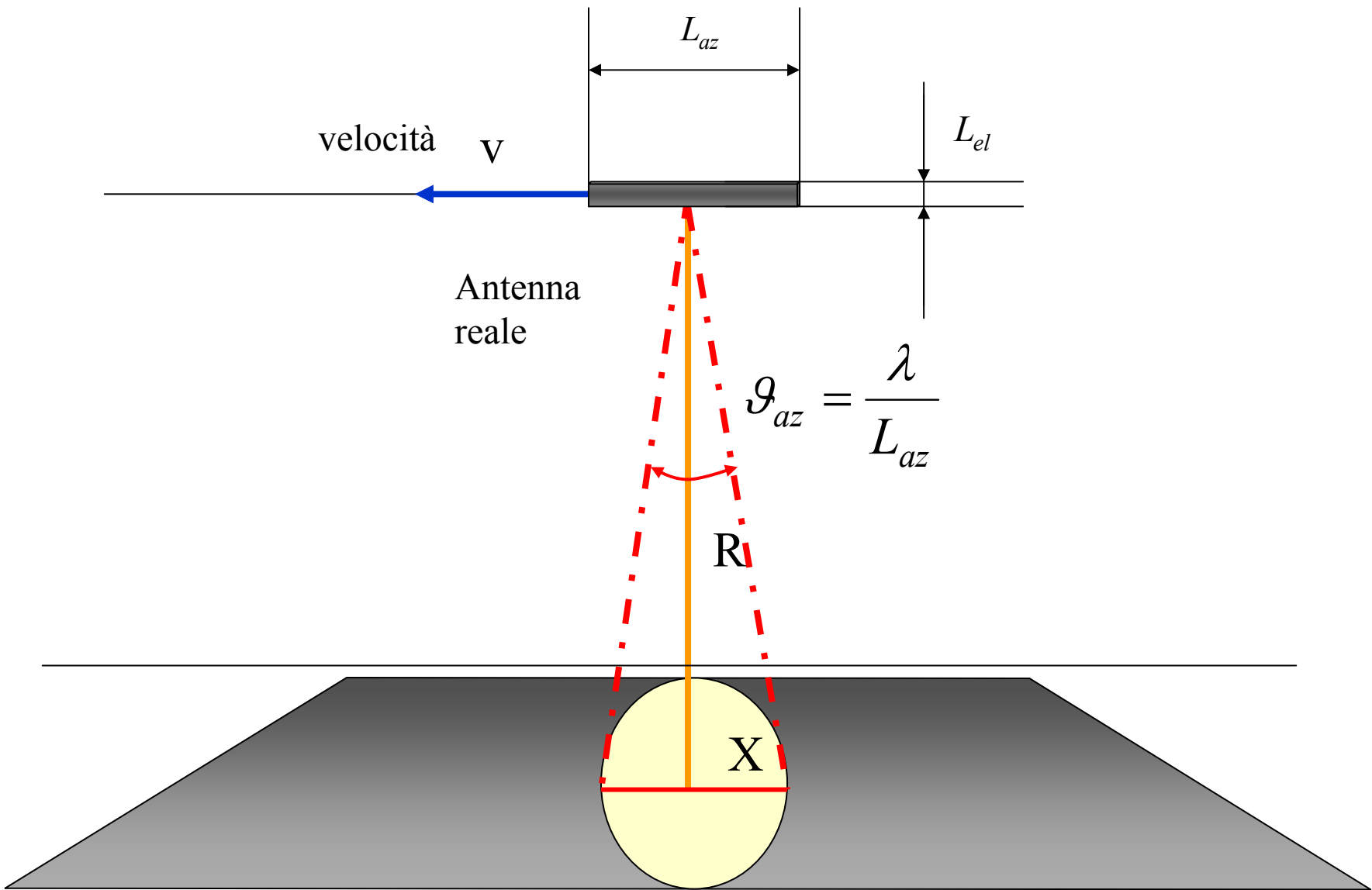
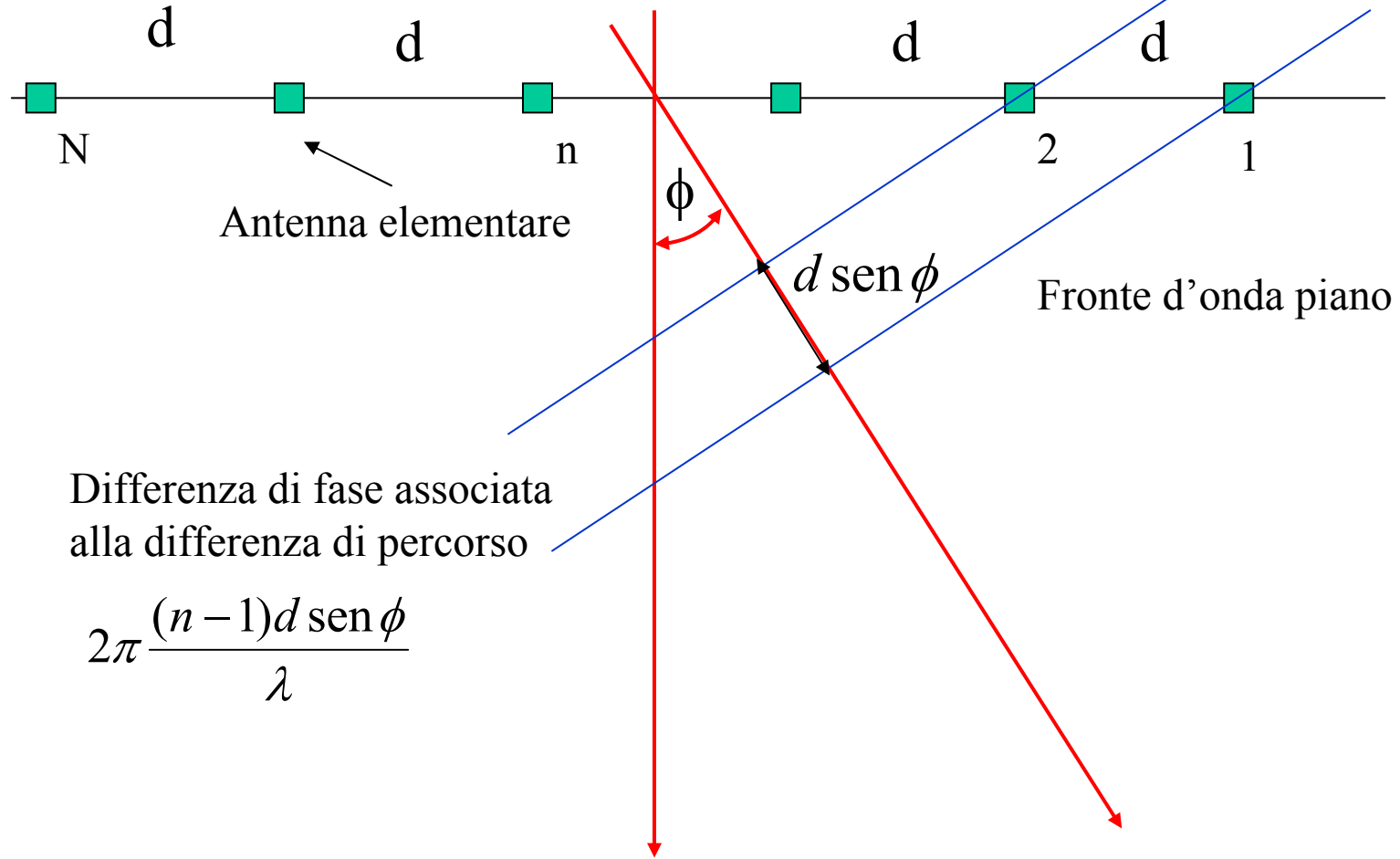


Figura 8.3

$$V_{\Sigma}(\phi) = e^{j2\pi f_0 t} \sum_{n=1}^N \exp \left\{ -j2\pi \frac{(n-1)d \sin \phi}{\lambda} \right\}$$

Somma dei segnali ricevuti dalle antenne elementari



Differenza di fase associata alla differenza di percorso

$$2\pi \frac{(n-1)d \sin \phi}{\lambda}$$

Figura 8.4

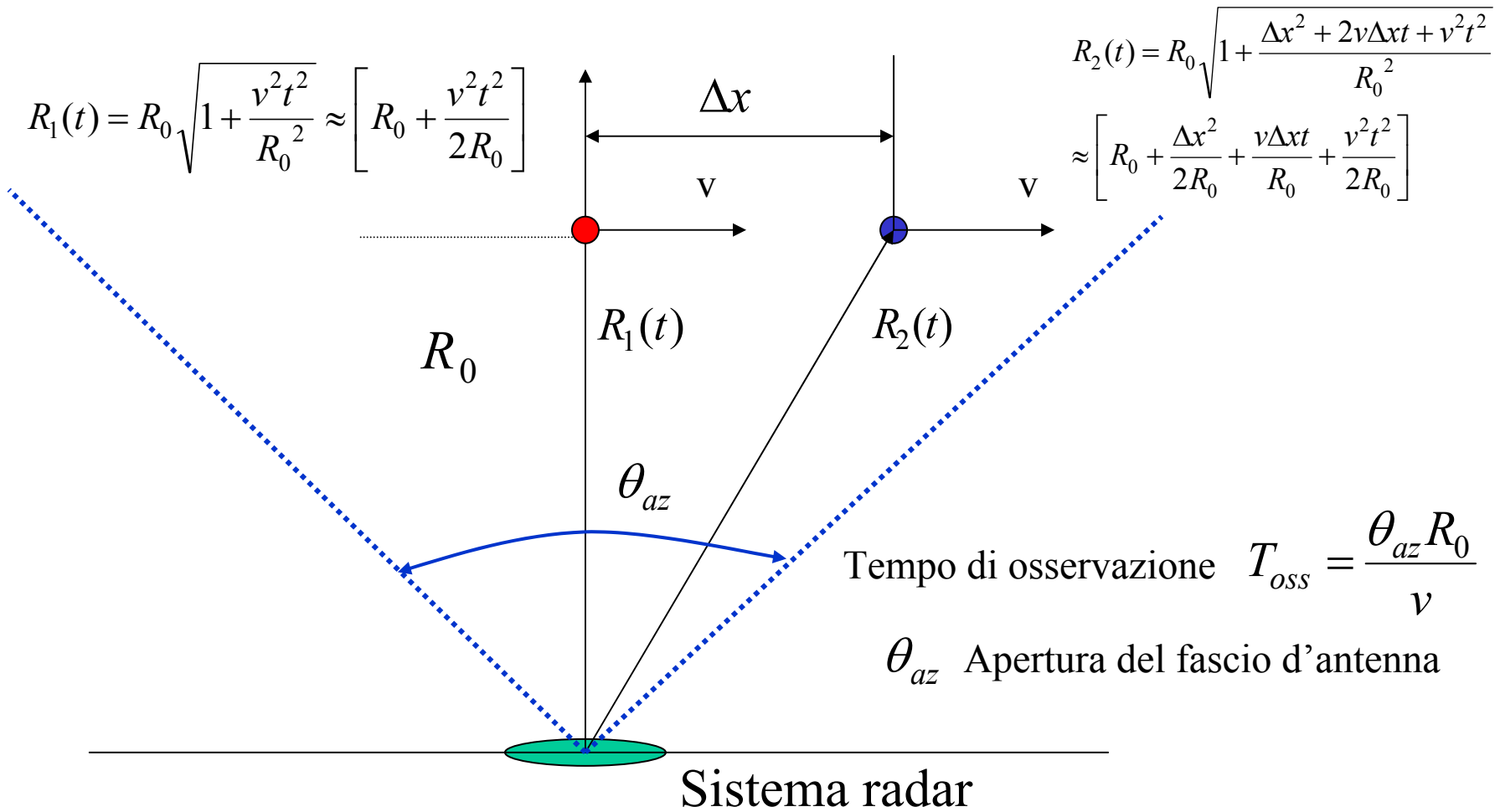
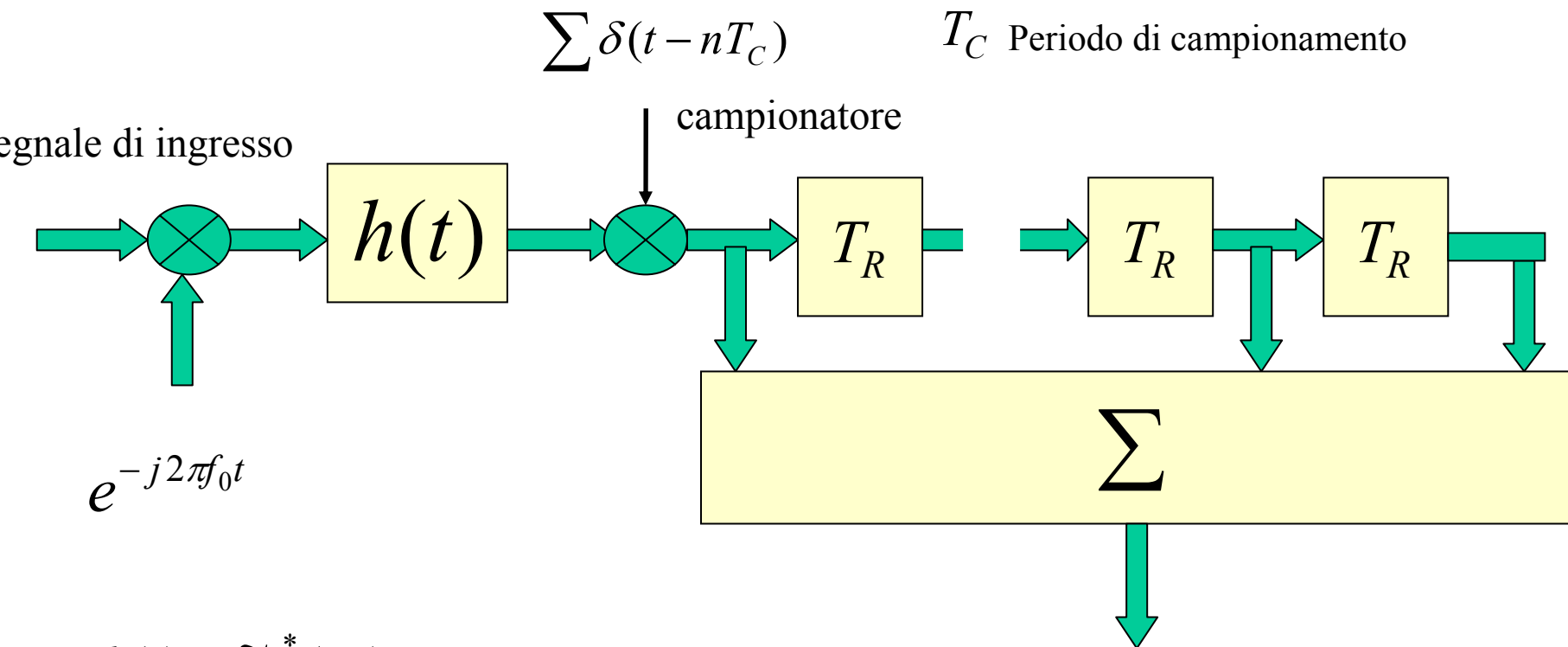


Figura 8.5

# SAR non focalizzato (architettura di sistema)

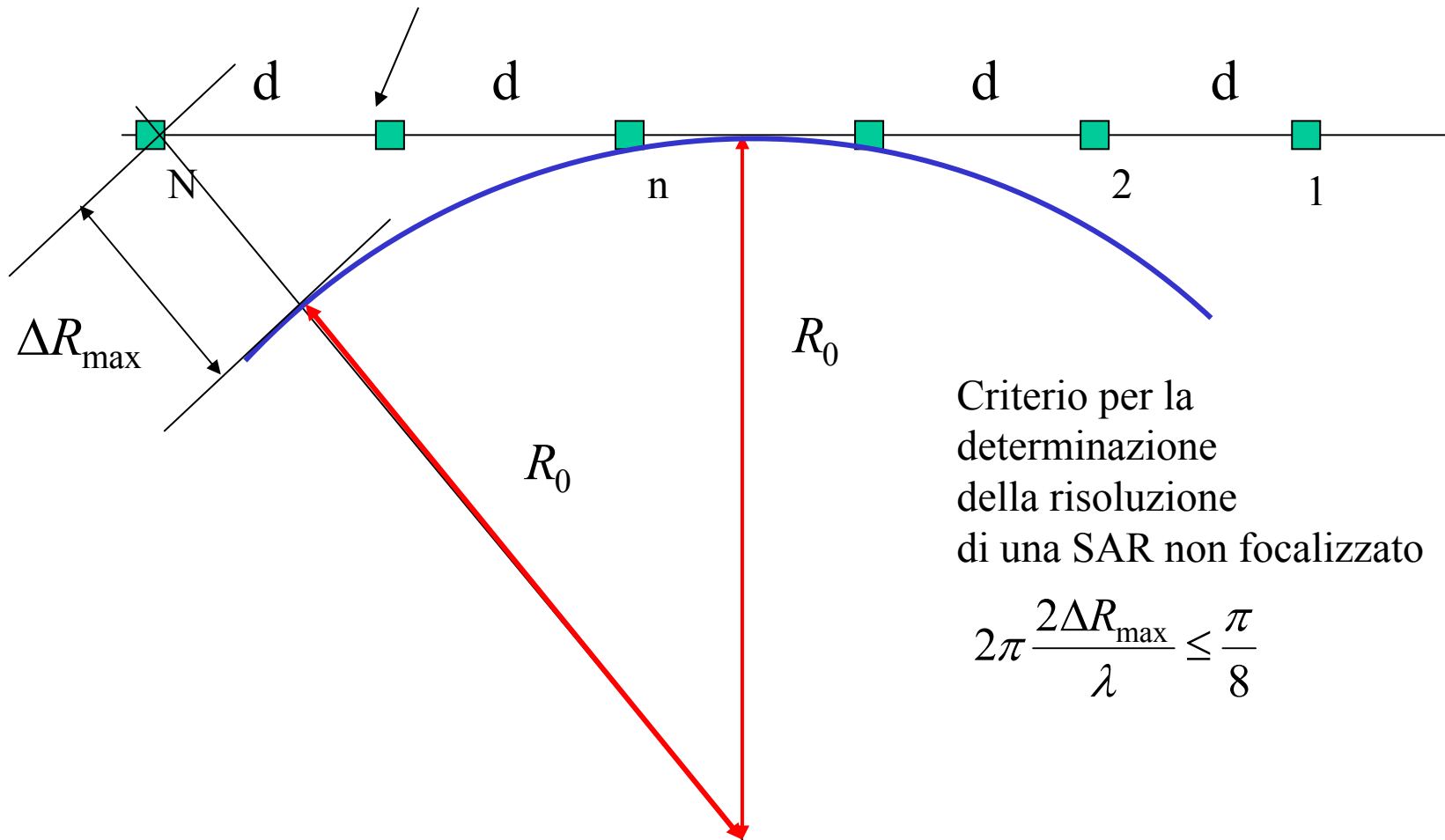


$$h(t) = \tilde{s}_T^*(-t)$$

Filtro adattato all'involuppo  
complesso del segnale trasmesso

Figura 8.6

# Antenna elementare



Criterio per la  
determinazione  
della risoluzione  
di una SAR non focalizzato

$$2\pi \frac{2\Delta R_{\max}}{\lambda} \leq \frac{\pi}{8}$$

Figura 8.7

# SAR focalizzato (architettura di sistema)

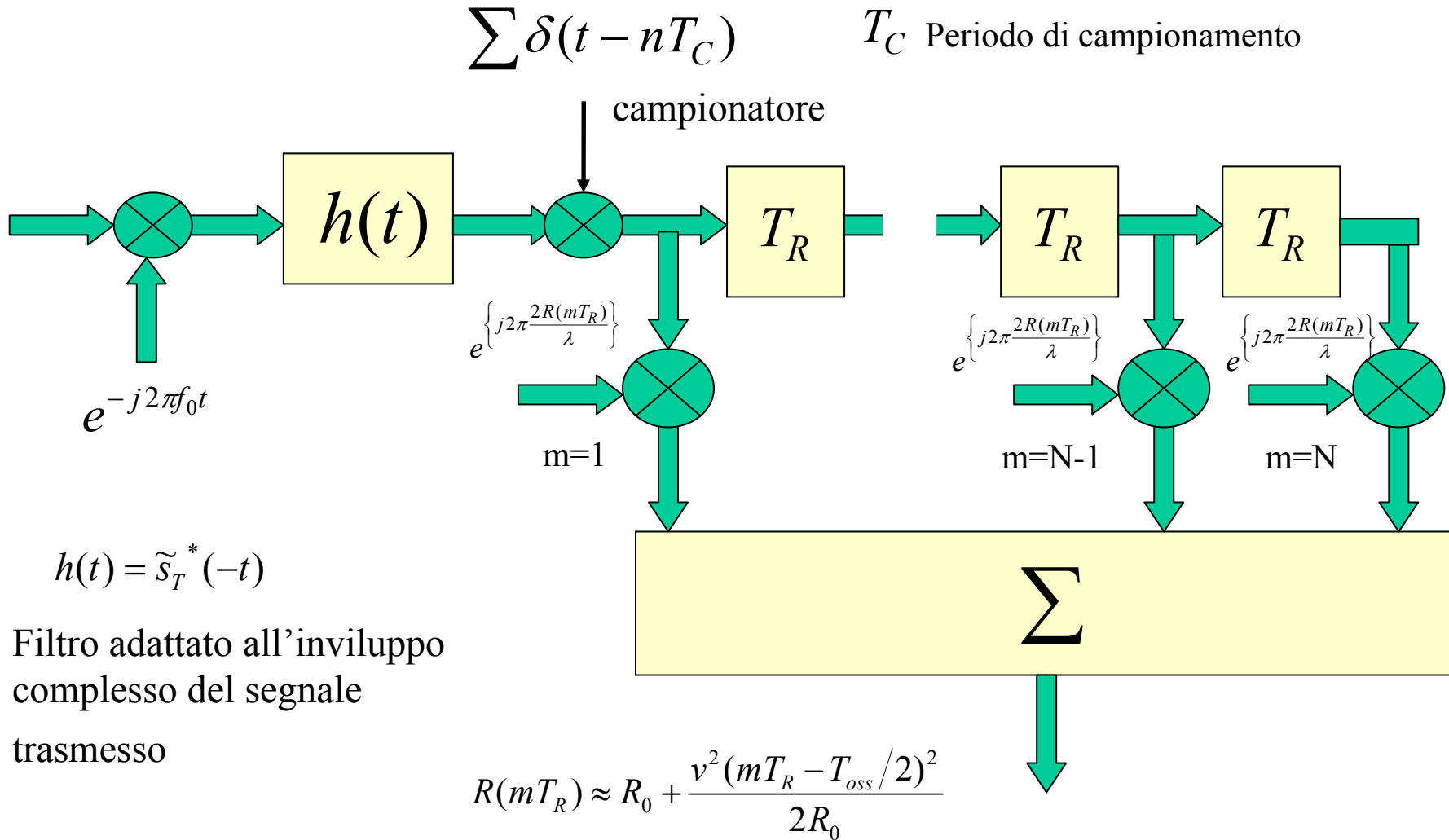


Figura 8.8



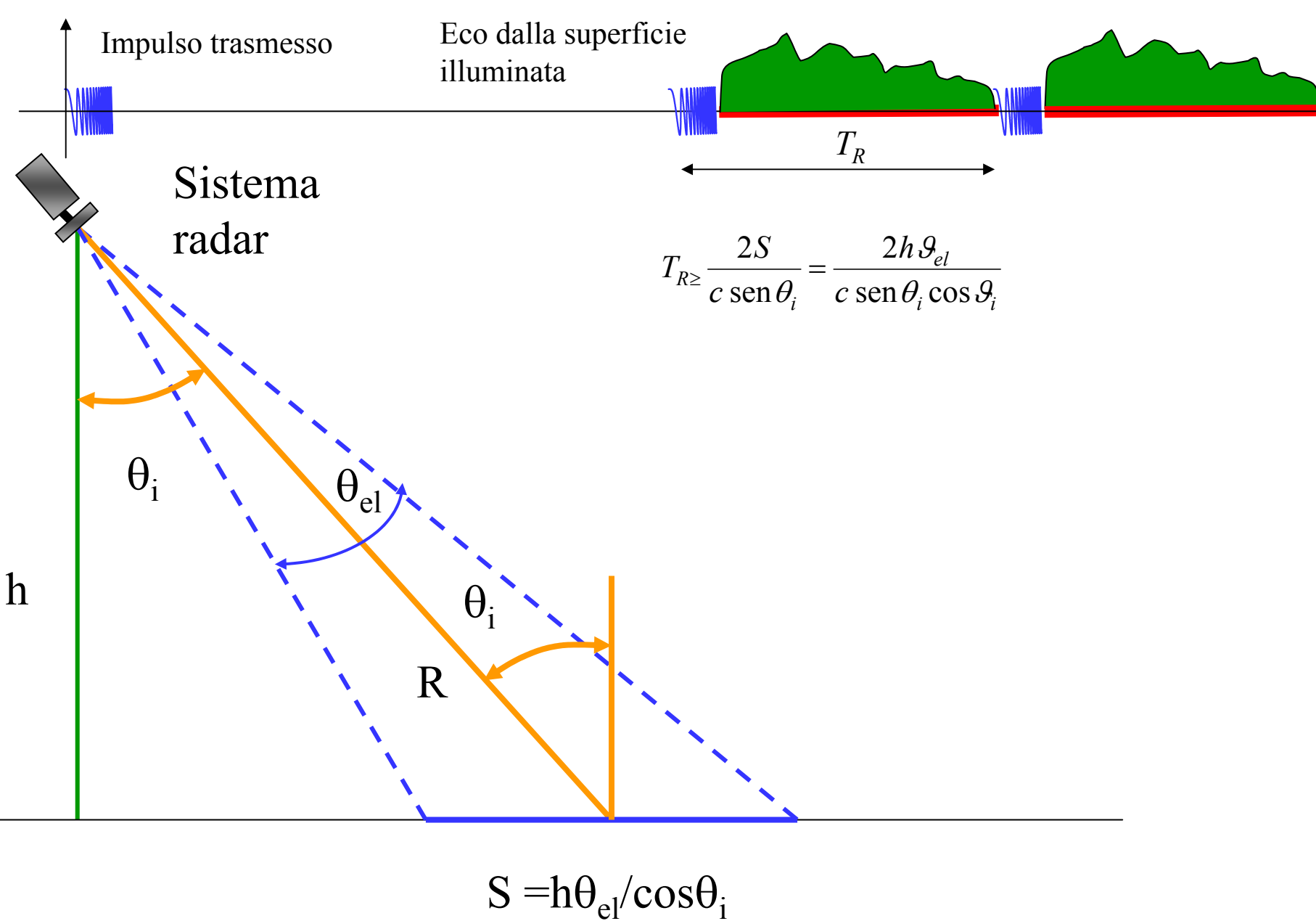


Figura 8.9

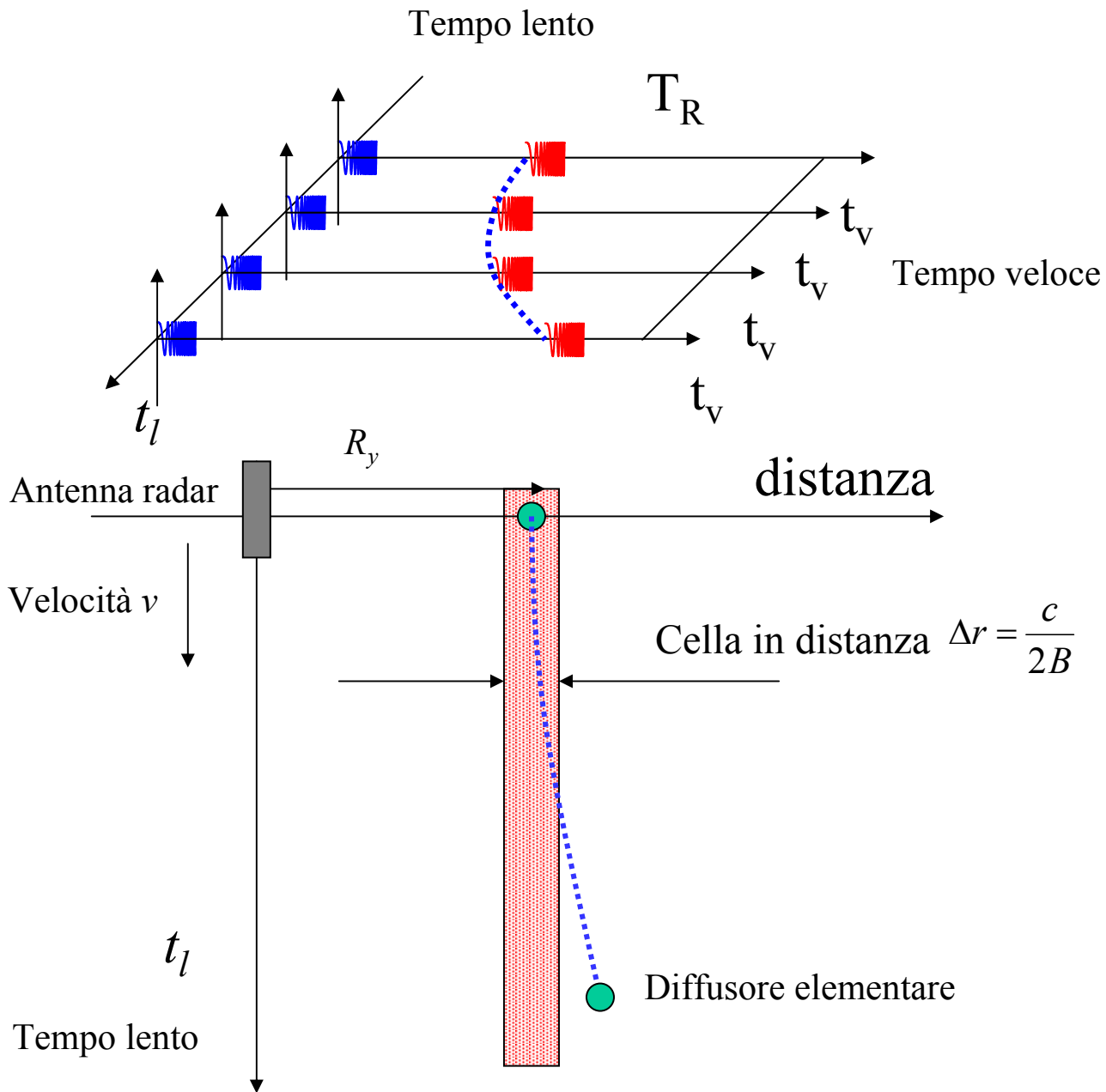


Figura 8.10