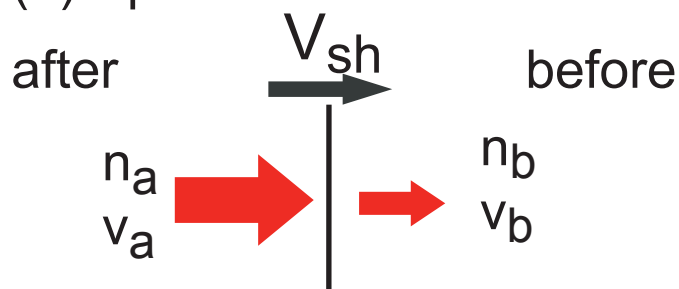
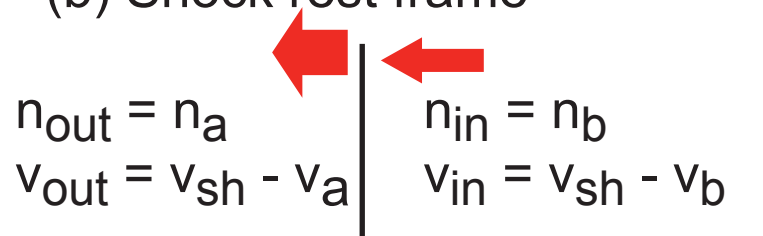


“Ideal” 1D-shock (for “best” cases)

(a) Spacecraft rest frame



(b) Shock rest frame

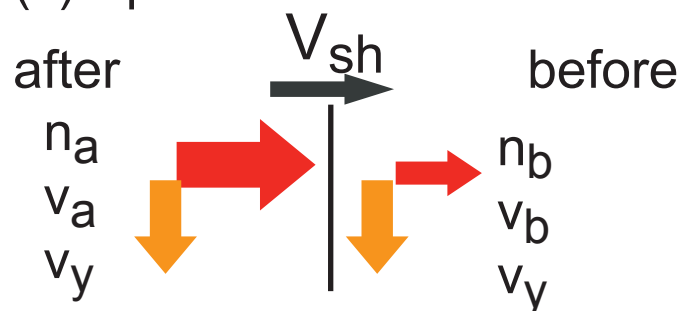


$$v_{out} \cdot n_{out} = v_{in} \cdot n_{in}$$

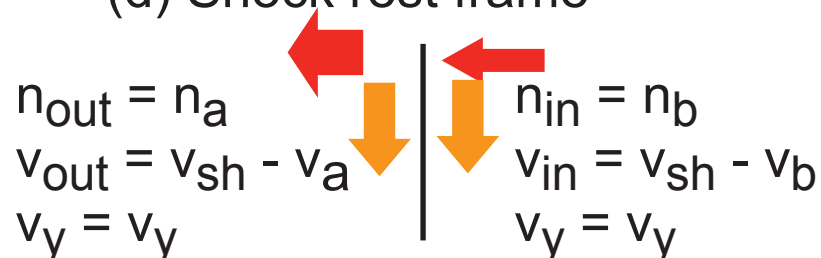
v_a & v_b are SW speed (V_{sw})

Oblique 1D-shock (filtered out in this work)

(c) Spacecraft rest frame



(d) Shock rest frame



$$v_{out} \cdot n_{out} = v_{in} \cdot n_{in}$$

v_a & v_b are $\cos\theta \cdot V_{sw}$
 $v_y = \sin\theta \cdot V_{sw}$

(e) Filter “good” shock angles using
 $V_{ph} = (X_{SC1} - X_{SC2}) / (T_{SC1} - T_{SC2})$

