



Bilans des AME:

$$\left\{ \begin{array}{c} \mathcal{G} \\ \vec{P} \end{array} \right\}_{A/0,1} = \left(\begin{array}{c|c} 0 & 0 \\ Y_A & 0 \\ 0 & 0 \end{array} \right)_A ; \left\{ \begin{array}{c} \mathcal{G} \\ \vec{T}_B \end{array} \right\}_{B/0,1} = \left(\begin{array}{c|c} X_B & 0 \\ Y_B & 0 \\ 0 & 0 \end{array} \right)_B$$

$$\left\{ \begin{array}{c} \mathcal{G} \\ \vec{P} \end{array} \right\}_{0,1} = \left(\begin{array}{c|c} 0 & 0 \\ Y_B & 0 \\ 0 & 10 \end{array} \right) ; \left\{ \begin{array}{c} \mathcal{G} \\ \vec{F}_{Air} \end{array} \right\}_J = \left(\begin{array}{c|c} X_J & 0 \\ 0 & 0 \\ 0 & 0 \end{array} \right)_J$$

Transport en B:

$$\left\{ \vec{e}_{A0/1} \right\} \times \vec{BA} \wedge \begin{pmatrix} 0 \\ Y_A \\ 0 \end{pmatrix} = \begin{pmatrix} -2,26 \\ 0 \\ 0 \end{pmatrix} \wedge \begin{pmatrix} 0 \\ Y_A \\ 0 \end{pmatrix} = \left. \begin{array}{c|c} 0 & 0 \\ Y_A & 0 \\ 0 & -2,26 Y_A \end{array} \right\}_B$$

$$\vec{BG} \wedge \begin{pmatrix} 0 \\ -10790 \\ 0 \end{pmatrix} = \begin{pmatrix} -10 \\ 952 \\ 0 \end{pmatrix} \wedge \begin{pmatrix} 0 \\ -10790 \\ 0 \end{pmatrix}$$
$$\left\{ \vec{e}_{P0/1} \right\} = \left. \begin{array}{c|c} 0 & 0 \\ -10790 & 0 \\ 0 & +10790 \end{array} \right\}_B$$

$$\vec{B} \wedge \begin{pmatrix} -500 \\ 0 \\ 0 \end{pmatrix} \text{ donc } \begin{pmatrix} x_J \\ 0,62 \\ 0 \end{pmatrix} \wedge \begin{pmatrix} -500 \\ 0 \\ 0 \end{pmatrix} = \boxed{\left(\begin{array}{c|c} -500 & 0 \\ 0 & 0 \\ 0 & 310 \end{array} \right)}$$

PFS

$$\left\{ \begin{array}{c} \vec{e} \\ \vec{F}_{\text{air}} \end{array} \right\} + \left\{ \begin{array}{c} \vec{e} \\ \vec{P}_{\text{a1}} \end{array} \right\} + \left\{ \begin{array}{c} \vec{e} \\ \vec{A}_{\text{a1}} \end{array} \right\} + \left\{ \begin{array}{c} \vec{e} \\ \vec{B}_{\text{a1}} \end{array} \right\} = \left\{ \begin{array}{c} \vec{e} \\ \vec{0} \end{array} \right\}$$

$$\left\{ \begin{array}{c|c} -500 & 0 \\ 0 & 0 \\ 0 & 310 \end{array} \right\} + \left\{ \begin{array}{c|c} 0 & 0 \\ -10790 & 0 \\ 0 & +10790 \end{array} \right\} + \left\{ \begin{array}{c|c} 0 & 0 \\ y_A & 0 \\ 0 & -2267y_A \end{array} \right\} + \left\{ \begin{array}{c|c} x_B & 0 \\ y_B & 0 \\ 0 & 0 \end{array} \right\} = \left\{ \begin{array}{c} \vec{e} \\ \vec{0} \end{array} \right\}$$

$$\begin{cases} -500 + X_B = 0 \\ -10790 + Y_A + Y_B = 0 \\ 310 + 10790 - 2,26Y_A = 0 \end{cases} \Rightarrow \begin{cases} X_B = 500 \\ Y_B = + 5879 \\ Y_A = \frac{-310 - 10790}{-2,26} = 4911,5 \end{cases}$$

$$\tan \theta = \frac{X_B}{Y_B} = \frac{500}{5879} = 0,08 < 0,1$$

donc la voiture ne glisse pas.

$$\left. \begin{array}{l} X_A = 500 \\ Y_B = 5879 \\ Y_A = 4911,5 \end{array} \right\} \tan \theta = \frac{500}{4911} = 0,101$$