

## 1<sup>re</sup> loi de Newton

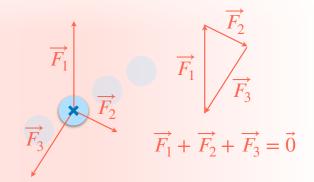
(principe d'inertie)

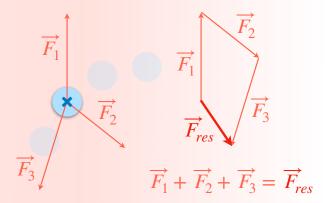
$$\begin{array}{ccc}
\mathsf{MRU} & \Leftrightarrow & \sum \overrightarrow{F} = \overrightarrow{0} \\
\Leftrightarrow & & & & \\
\end{array}$$

$$\overrightarrow{\Delta v} = \vec{0}$$

Et donc (contraposée)

$$\begin{array}{ccc}
\mathbf{MRU} & \Leftrightarrow & \sum \overrightarrow{F} \neq \overrightarrow{0} \\
\Leftrightarrow \\
\overrightarrow{\Delta v} \neq \overrightarrow{0}
\end{array}$$





$$m \times \overrightarrow{\Delta v} \approx \overrightarrow{F}_{res} \times \Delta t$$

$$\overrightarrow{\Delta v}$$
  $\overrightarrow{F}_{res}$