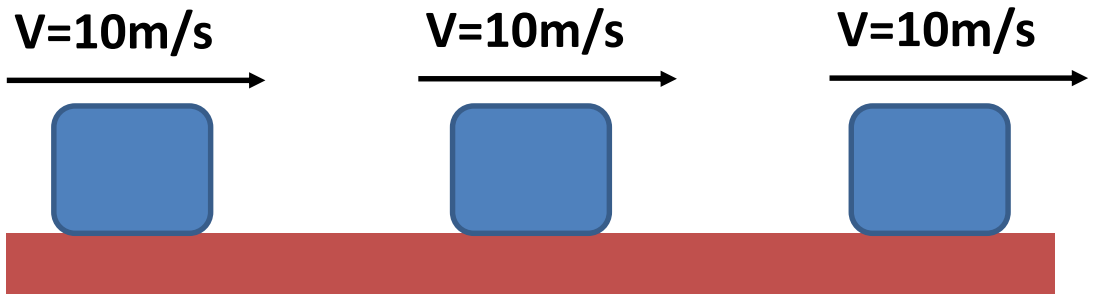
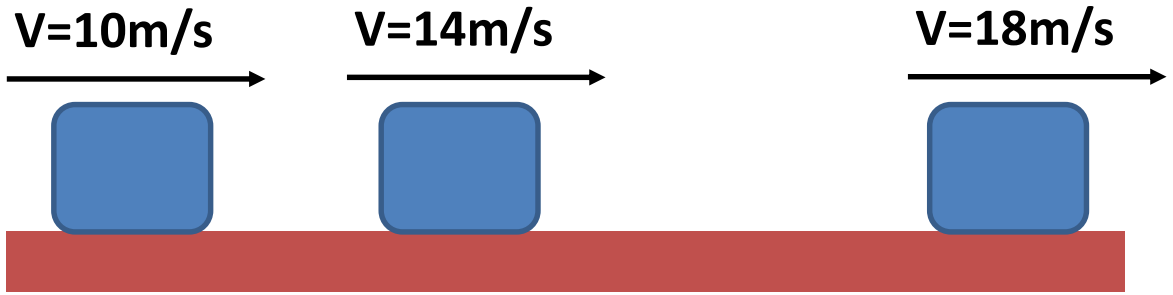
Dinâmica do MCU
Plano vertical

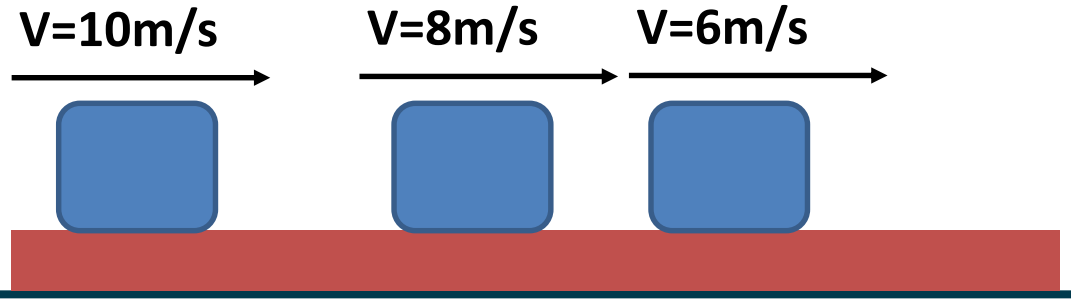
Prof. Jadoski
Física

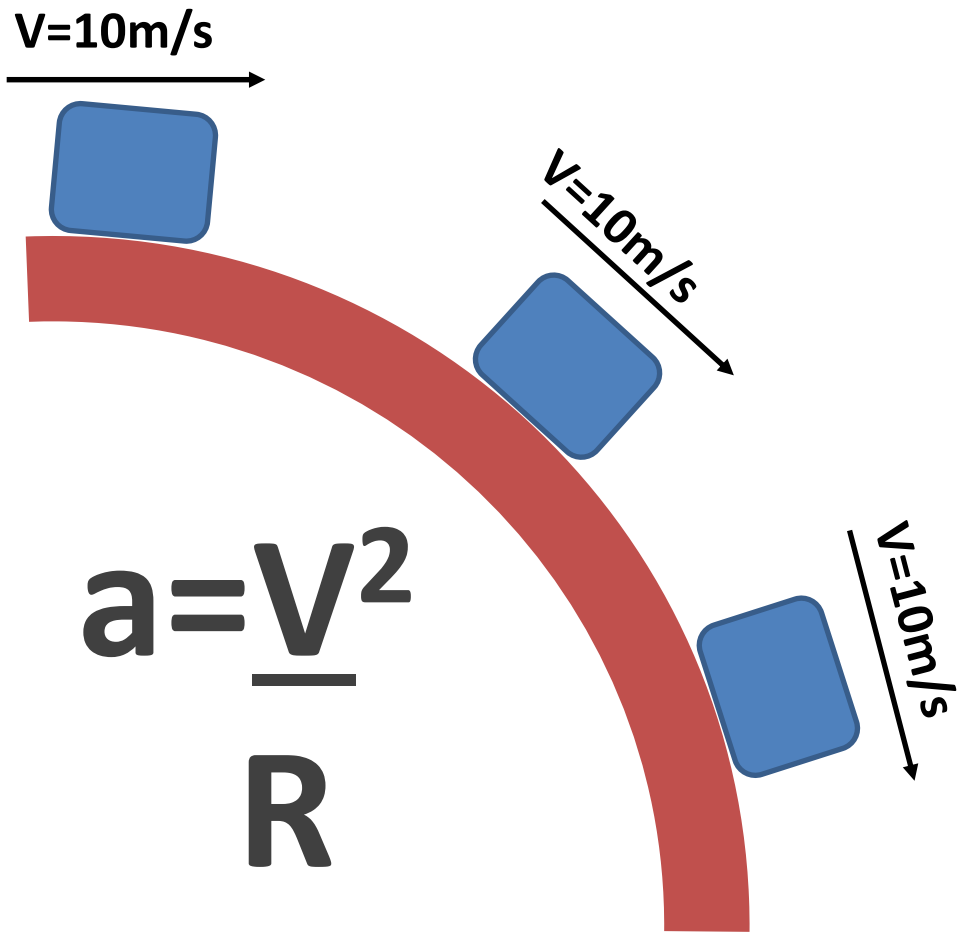
Forças atuando e suas implicações

$$F = m \cdot a$$

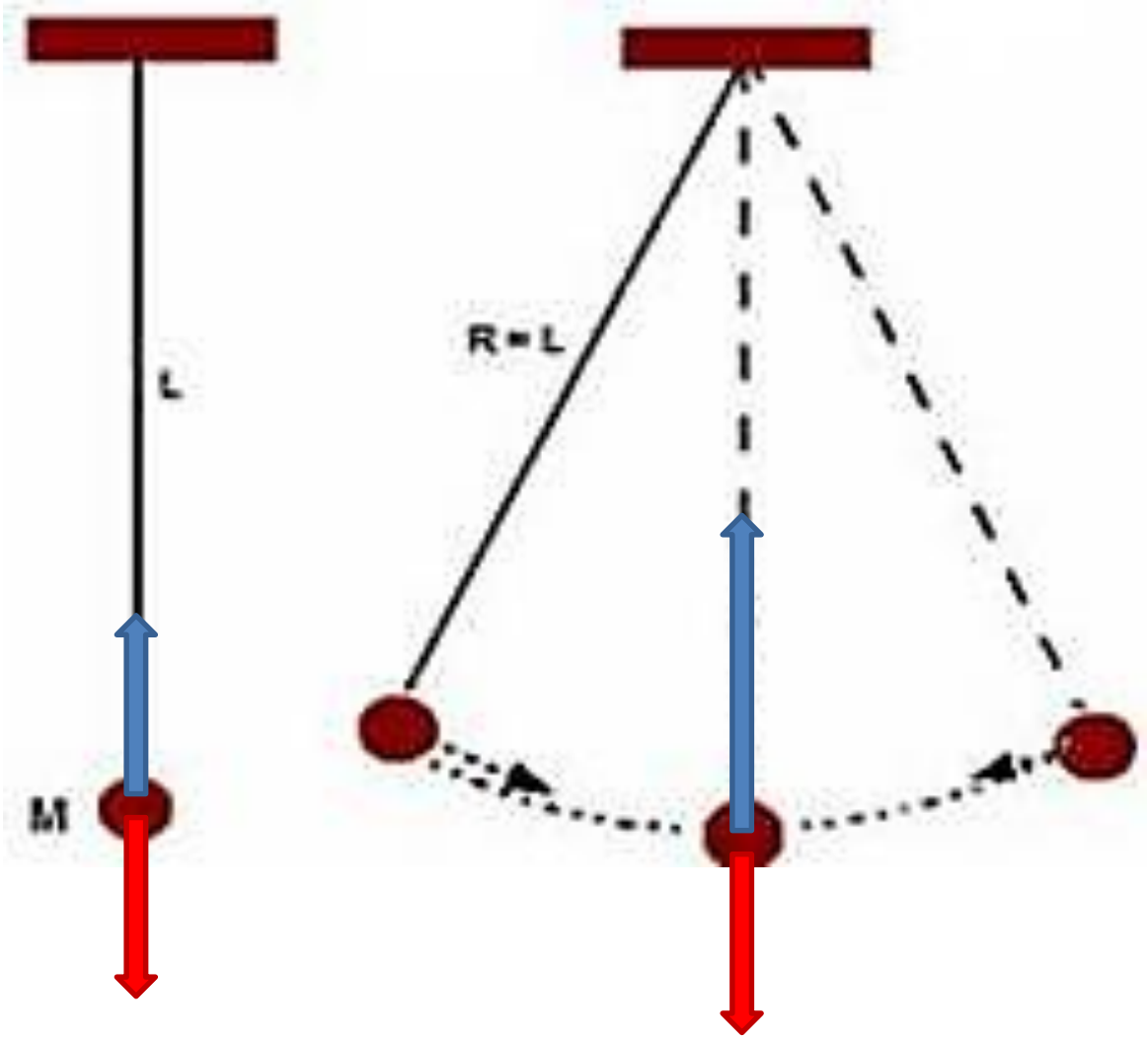








Força resultante centrípeta



$$F_r = m \cdot a$$

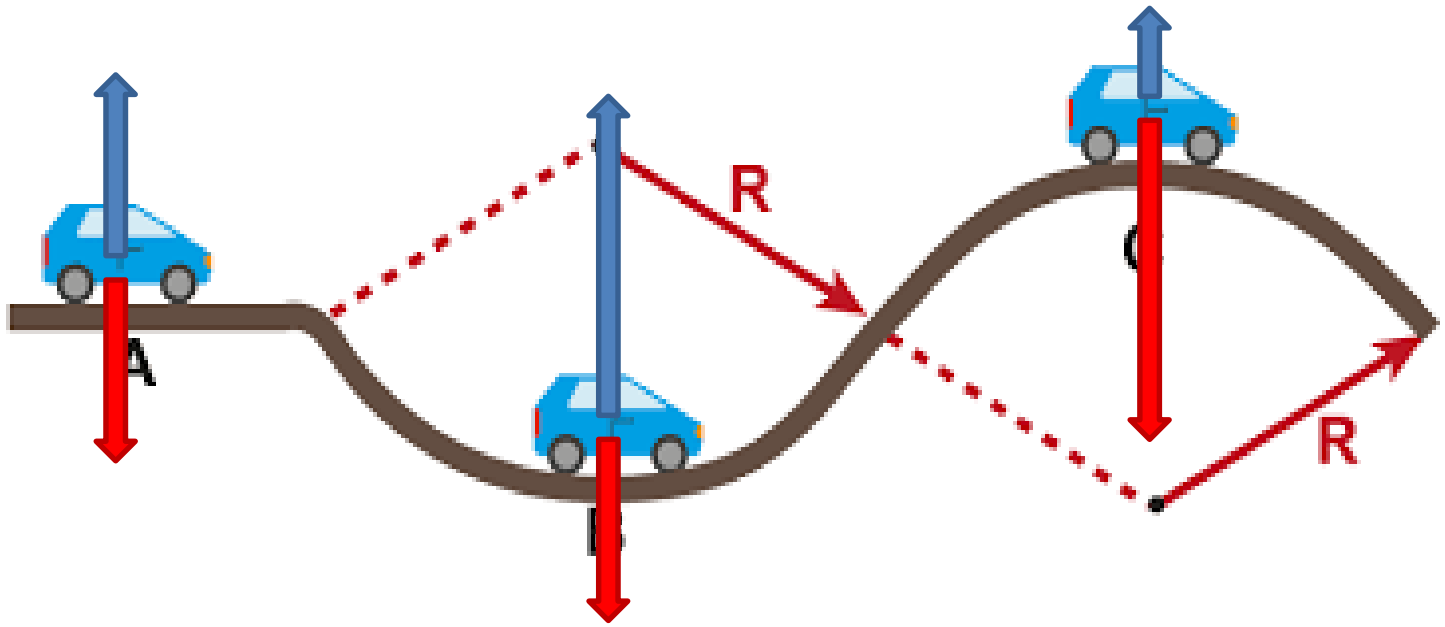
$$F_r = m \cdot \frac{V^2}{R}$$

$$T - P = m \cdot \frac{V^2}{R}$$

$$T = P + m \cdot \frac{V^2}{R}$$

Força resultante centrípeta

$$P - N = m \cdot \frac{V^2}{R}$$



$$F_r = m \cdot a$$

$$F_r = m \cdot \frac{V^2}{R}$$

$$N - P = m \cdot \frac{V^2}{R}$$

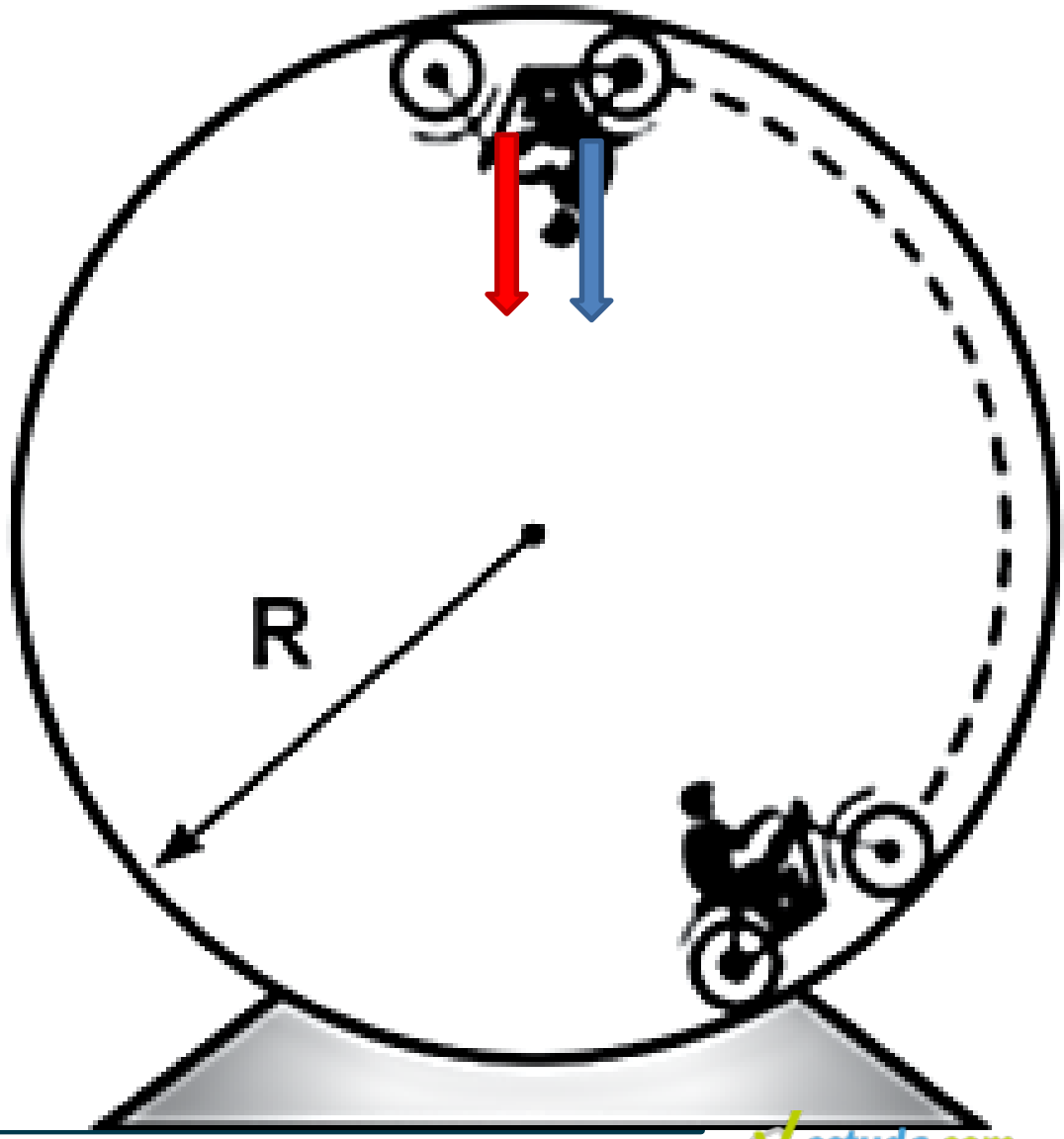
Força resultante centrípeta

$$F_r = m \cdot a$$

$$F_r = m \cdot \frac{V^2}{R}$$

$$N + P = m \cdot \frac{V^2}{R}$$

$$P = m \cdot \frac{V^2}{R}$$

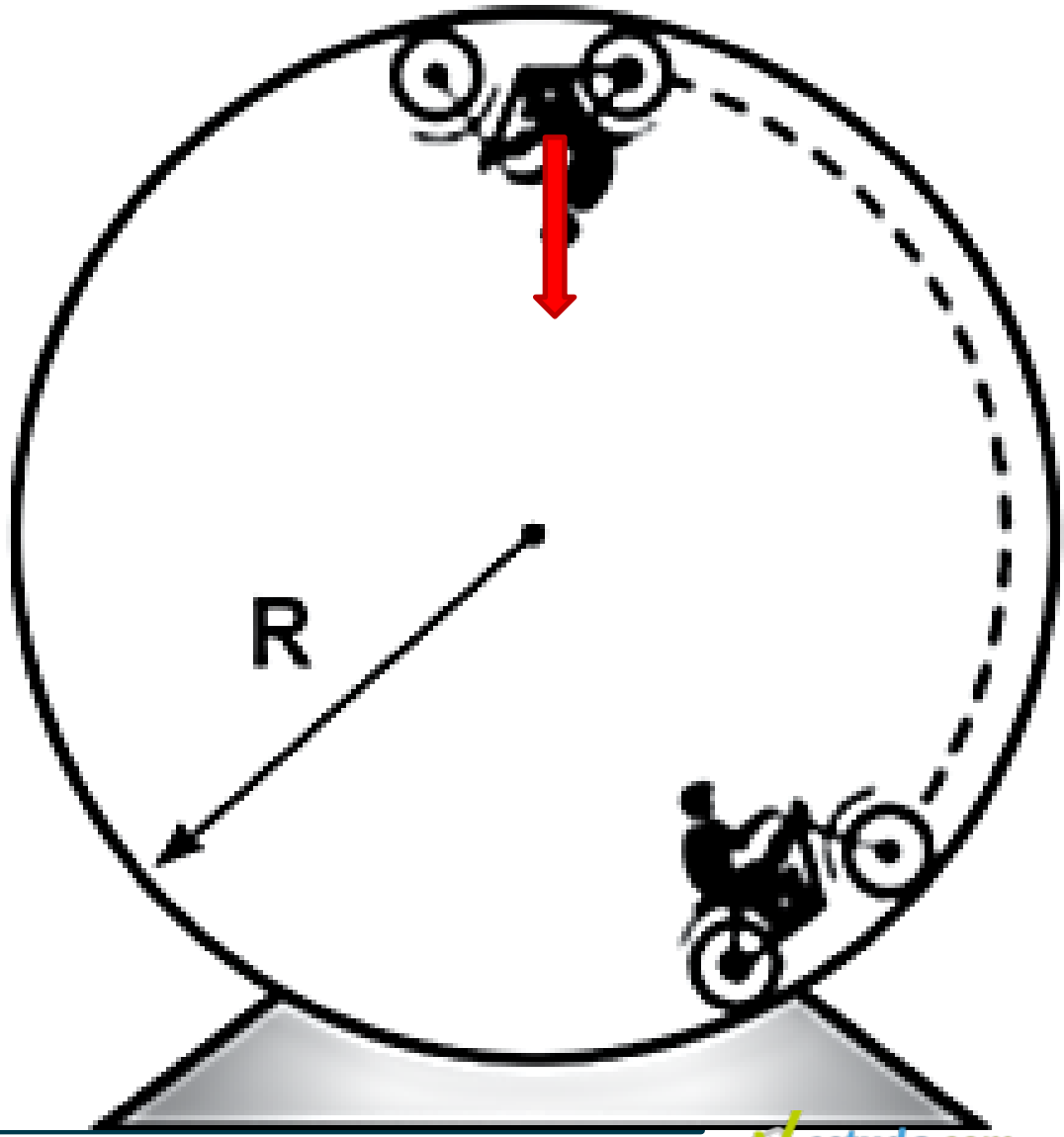


Força resultante centrípeta

$$P = m \cdot \frac{V^2}{R}$$

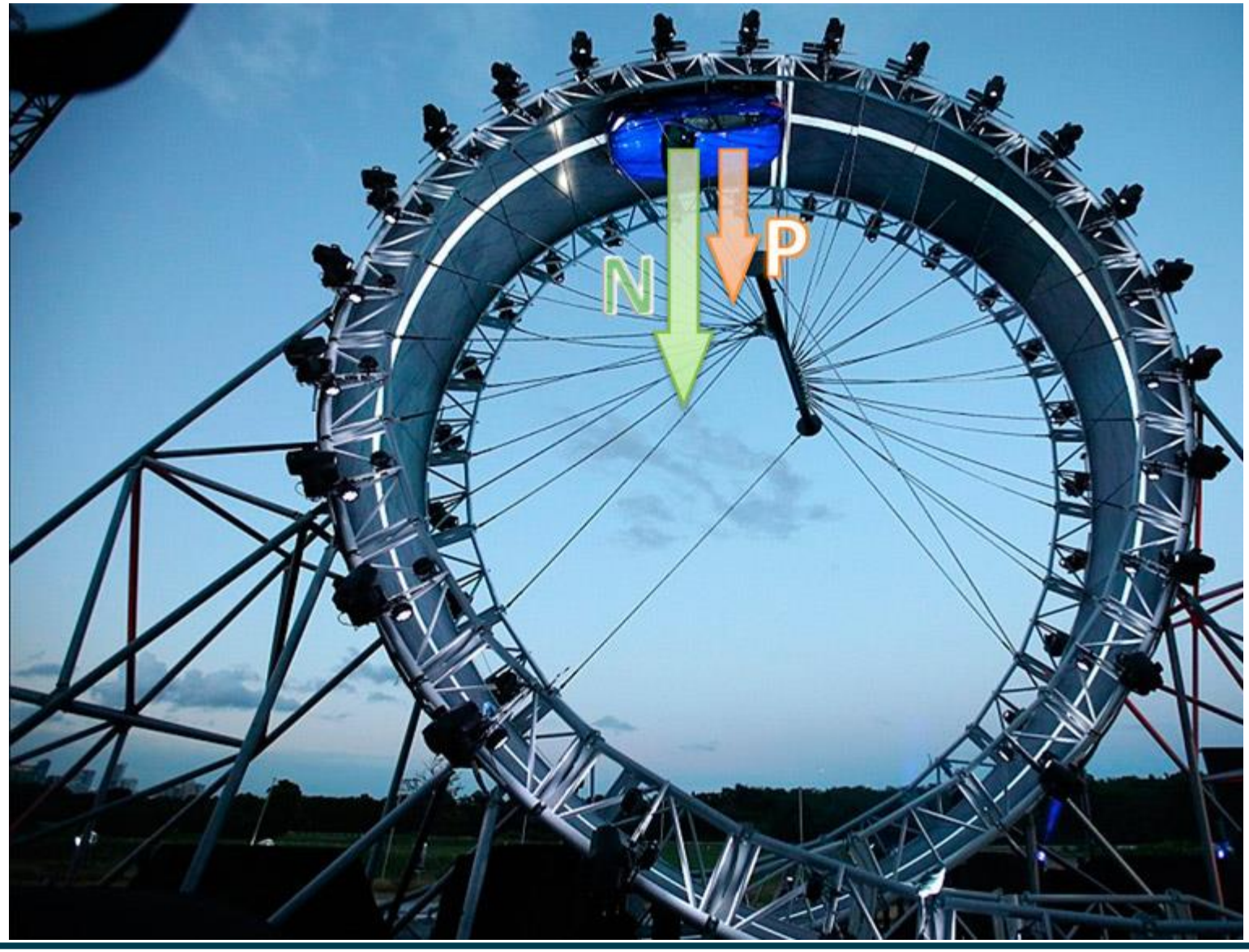
$$m.g = m \cdot \frac{V^2}{R}$$

$$V = \sqrt{R.g}$$



Força resultante centrípeta

$$V = \sqrt{R.g}$$



F_{rc}

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