

Raw Data Sheet

Student Name: _____

Team members:

1.- _____ 2.- _____

3.- _____ 4.- _____

Instructor: _____

One Dimensional Collisions

Length of the sail: _____ (cm)

Table 1.- Columns left to right indicate collision type, car's mass and the time required to travel the length of the sail. The subindices 1 and 2 indicate car number, while i and f refer to the initial and final states. X stands for "not required".

Collision Type	m_1 (g)	m_2 (g)	t_{1i} (s)	t_{1f} (s)	t_{2f} (s)	$t_{2f} + t_{1f}$ (s)
Perfectly Elastic				X		X
Partially Elastic						
Totally Inelastic					X	X

Two Dimensional Elastic Collisions

Frequency of the sparks : _____ (Hz)

Puck's mass : _____ (g)

Table 2.- Raw data: Δl_1 and Δl_2 are the distances between selected points along each track; θ_1 and θ_2 are the angles between the coordinate axes and the velocity vectors. **Note: time is the elapsed time between the selected points.**

State	$ \vec{\Delta}l_1 $ (cm)	θ_1 (degrees)	$ \vec{\Delta}l_2 $ (cm)	θ_2 (degrees)
Initial		zero		
Final				