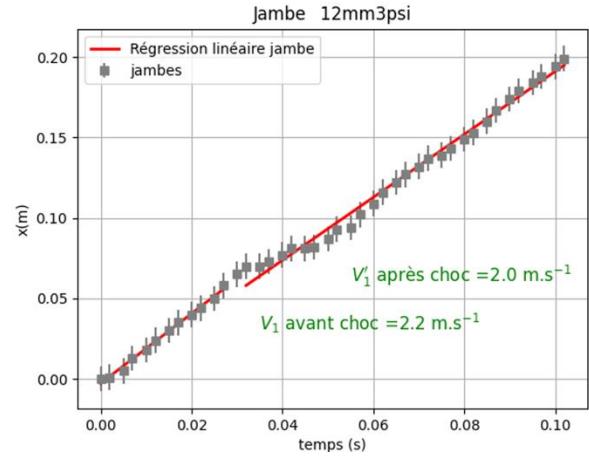


# Impact of Hitting Techniques on Ball Speed

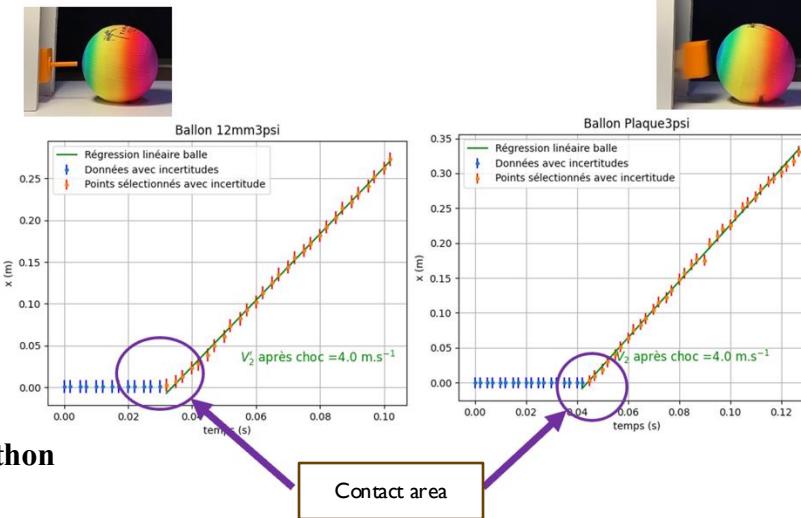
## Research Project



The compound pendulum



Graphical Output – Python



Ball and Striking Heads Mounted on the Pendulum

## Objective :

Investigate whether the way a ball is struck affects its launch velocity.

- Designed and built a ball-hitting machine using a pendulum system.
- Modeled different striking head shapes in SolidWorks to represent various techniques.
- 3D printed the heads and conducted physical experiments.
- Used video tracking software to extract motion data.
- Analyzed the results in Python to assess the influence of each hitting method.

