

17. CHRONOPHOTOGRAPHIC GUN

Team Croatia
Opponent: Marko Šarić



PROBLEM TEXT

Étienne-Jules Marey pioneered the use of time resolved photography to study physiology of humans and animals, and in particular their postures and locomotion. Propose a quantitative study of important physiological functions or parameters that would require analysis of similarly taken videos.

THEORY

Pros:

- Sketch
- Explained the anatomy

Cons:

EXPERIMENT

Pros:

- High speed camera
- Tracking software
- Multiple measurements
- Varying the mass

Cons:

RESULTS AND CONCLUSION

Pros:

- Good conclusions
- Results agree with theory

Cons:

- No units on graphs

POINTS FOR DISCUSSION

- Jumping distance of different grasshoppers (smaller or larger)?
- What forces are acting on the grasshopper (sketch)?

THANK YOU!

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