



# 4. Popping Buoy

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Opposition

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# Reporter's Theory - Pros & Cons

1. Excellent definition of the phenomenon
  2. Clear definitions
  3. Sufficient theoretical support of the results
  4. Included relevant parameters but not all.
  5. Presence of visual aid.
1. Missed important variables .
  2. Chaotic presentation.
  3. Too much theoretical background which was unnecessary.

# Experiment - Pros & Cons

1. Interesting approach of the phenomenon
  2. Well conducted experiments
  3. Good experimental design & process
  4. Method explained & can be reproduced by anyone
  5. Justified conclusions that verified the hypothesis and confirmed the theory
1. Not enough parameters tested
  2. Experiments conducted in a non-controlled environment
  3. No errors and causes behind them explained.

# Theory vs Experiment - Pros & Cons

1. Connected well the theory to experiments
  2. Detailed graphs about the ball path confirmed the hypothesis
  3. Interesting results, led to important conclusions
  4. Justified conclusions that verified the hypothesis and confirmed the theory
1. Quite chaotic conclusions.
  2. Lots of untested parameters/parameters that haven't been tested to full extent.

# Conclusions

1. Well-defined almost all of the relevant parameters & theory
2. Excellent definition of the phenomenon
3. Didn't mention the importance of the optical density
4. Did not focus on the experiment as much as he did in the theory
5. Experiments were properly conducted and shown
6. Causes of errors in the measurements have not been explained

# Suggestions for further improvement

- Examine the theory in more detail to understand the significance of the optical density of the water to the outcome
- Try to find a more accurate and objective mechanism because of the fact the person who conducts the experiment affects the results.
- Explain the errors of your measurements and the reasons behind them
- Take more measurements per experiment so you can see the points of interest that appear in the graphs.
- Test more parameters.

Thank you for your attention!

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Popping Buoy  
Opposition, **Team Fryganiotis, GR**

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