

# PROJECT REPORT REF: "Generalization of Newton's third law of motion"

THE SWOT (Strength/Weakness/Opportunity/Threat) of the Project

## **Strength:**

The idea of considering the Action = - (Coefficient) Reaction is a sound thought and the same had been discussed earlier on internet net as well for example Google search with "Failure of Newton's third law of motion" gives 100's of hits. On the other hand the discussion about the impact of the shape of the object is missing. The strength of the project is the consideration of shape. The action and reaction are directed towards the center of gravity, which in turn is a point, so it is the action versus reaction force towards the point mass. How the shape will affect is not yet clear. Hence the originality of thought cannot be denied.

## **Weakness:**

The main worry is the investigator of project does not at all define about the experimentation part. One would like to know how exactly the experiment on different shape bodies of same mass will take place. The exact measurement of action and reaction in terms of say force needs to be elaborated. This part is completely missing. Coining a thought, which is appreciable, is one thing but to prove the same through an established scientific method within accuracy of measurement is the real thing. For any scientific discovery the approval through known scientific accurate measurement is necessary.

## **Opportunity:**

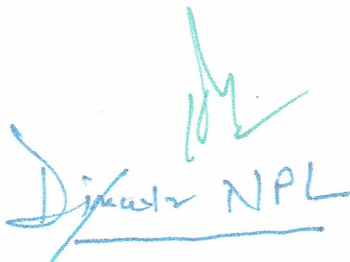
If, proven, yes the opportunity is huge. But here one is skeptical because the investigator has not given the details of experiment to be done, the instruments to be used and the scientific protocol for measurement in terms of precision and accuracy.

## **Threat:**


The project as such is half backed same need to put with clear scientific details in terms of experimentation, required tools and budgeting for the instruments in detail.

## **Conclusion:**

The project is though encouraging and has some originality, the same cannot be approved in present form, because the same lacks the scientific experimental part and the step by step methodology. The investigator may re-submit the project with details of experimentations and the list of required instrumentation.

  
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