REVIEWS ON THE MANUSCRIPT [20]

Reviewer 1:

The manuscript would need very substantial preparation for improvement. So far I do not think that it has the potential to be published.

A few commentaries worth attention:

An object's "height force" is a very unclear notion.

You say that there are more fractures in a noodle when a spaghetti falls from a greater height. Is there any physical explanation for that?

The data you provide contains incoherent figures for e.g. spaghetti length (205 cm.)

The conclusion does not give conditions under which spaghetti does not break, in contrast to the title of the manuscript and the alleged goals of the project.

Reviewer 2:

The structure is relatively good.

On page 2 the collision is stated as "completely inflexible". I would suggest "completely elastic".

The formula at the bottom is wrong : Mv1 = mv2 should be mv1 =mv2.

On page 3 the noodles are stated to be 205 cm long, clearly absurd. I believe the correct value should be 25 cm.

Table 1

Some of the rows lack labels. The labeling of the columns is confusing: what is meant by "Amount"?

For the inclined fall experiments I would like to know the inclination angle.

The table contains strange numbers like 13/8.

Table 2

Much of the same: Strange numbers again 14/7 or 11/7.

Table 3 and 4: The same strange numbers.

I would like to see plots of the results.

It is a pity that this paper is not very well presented. It contains some valuable experimental data but presented in a confusing way.

I cannot recommend this paper.

Reviewer 3:

The manuscript is unfortunately not meeting my expectations and is not recommended for revision or publication.

The reasons for this opinion are as following:

The conclusions of the project, even upon an imaginary clarification, are trivial and strongly incoherent at the same time.

The basic statement is that the “more fractures occur” with an increasing release height and “fractures decrease” when “the angles approach the vertical line”.

Besides to these statements and some very obscure and chaotic tables that seemingly report on the fractures at different conditions, I do not see any physical parameter introduced in the text to characterize either the probabilities of fracture, or the mechanical stresses in spaghetti or any other physically meaningful feature.

The tables with missing or incoherent parameters (“Fractures” measured in centimeters and having values of 15/5 or 12/6) leave little or no chances that meaningful dependencies may be plotted from the data sets.

The data sets leave the open questions only : whether the measurements were repeated 6 times (text) or mostly 3 times (table 4)? What do the average values mean (12/6)?

I do not unfortunately see any systematic investigation plan and I do not find the acquired data convincing, even if each data set is verified and clarified scrupulously.

The data is represented inappropriately. There is no theoretical analysis involved.

Many details of the text suggest that not even a minimum care was taken during the manuscript preparation (205 cm long noodles is a clearly wrong claim.)

I would like to encourage the author to bring more clarity to his future writings, but I cannot unfortunately recommend this paper for the book.