REVIEWS ON THE MANUSCRIPT [29-2]

Reviewer 1:

Comments:

The term „frequency of breaking" should have a very clear definition mentioned in text. It is now unclear. Provide a definition.

Introduction: th e → the

Let's assume that the very central part of spaghetti isn't stretched whenever spaghetti is curved and has length L0. → why can we do such an assumption?

Maybe it would be better to consider the ratio between length and diameter next to the mass in the analysis?

Why a standing wave with such a wavelength occurs? (why exactly 1 cm is the placement of the first antinode?) Consider a clarification.

Recomendations:

Can be accepted. The weaknesses stated above should be repaired. Spell checking before print is recommended.

Reviewer 2:

I think there was very much improvement on the paper.

The conclusion of the paper is still not quite to the point of describing a critical e.g. *height*, where the breaking probability e.g. goes below 50% for specific settings.

Other than that, I think the paper is okay!

Reviewer 3:

The strongest and weakest aspect of the paper

The strongest aspect: the paper is a report on experiments conducted with various types of spaghetti.

The weakest aspect: only vertical position investigated and no connection to the literature.

Organization and presentation

The paper is well structured.

Style

The paper is written in clear language.

Additional questions & remarks

In fig. 1, you should rather plot height as a function of t^2 instead of t. Then the relation becomes linear and you clearly see any deviations. Why are there no measurement errors in the graph? A linear function fitted to your data would then have the slope $g/2$ and you could easily verify your measurements.

Please fix the vector signs in your first formula.

Define the Young's modulus in the text, in case the Reader is not familiar with elastic coefficients.

When introducing ε, it is in my opinion necessary to illustrate it in a figure, i.e. a schematic drawing. Otherwise it is very hard to follow your model.

What actually happens in fig. 4? Comment on it briefly.

While figs. 5 & 6 have measurement errors, figs. 7-11 don't. Why is this? Please include them or emphasize the magnitude of errors in another way.

References

No references at all. On the other hand, it could be useful for the Reader to know the current state-of-the-art.

I recommend including some elasticity theory textbooks and making connection to a well known paper on spaghetti breaking by Audoly and Neukirch from PRL (also 2006 IgNobel Prize): http://www.lmm.jussieu.fr/spaghetti/publi.html, http://www.lmm.jussieu.fr/spaghetti/audoly_neukirch_fragmentation.pdf

Recommendations

Please check all the remarks; try to apply them.

Think over and build a references section, setting your problem in the context of existing research.

Summary

The paper is recommended for publication after revision.

Editorial request

Figure 2 (right) and Figure 4: consider placing $\Delta L/L$ and *force, N* as extra captions on the pictures. Note that the x-axis and y-axis are not introduced on figure 4.

Figure 8: consider noting a correlation between price and probability of fracture; this would be a clearer way to express the message.

Figure 7, 8: different symbols are too small to be resolved properly upon printing. Consider an improvement.

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