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Resubmission of proceedings *Using optical tweezers to measure the forces exerted by molecular motors in onion cells*, ID_43.

Dear Editors,

We thank the reviewer for their comments regarding the submission *Using optical tweezers to measure the forces exerted by molecular motors in onion cells* (ID_43). We respectfully address the comments as indicated below.

- The reviewer indicated to use "optical tweezer" as singular.
Response: *Tweezers* is one of those words like pliers, pants, and scissors that are always spoken of as a pair, despite being a single object. In the literature this is then the accepted norm, as for instance used in the announcement of the Noble Prize (<https://www.nobelprize.org/nobel-prizes-2018/>):

"The Nobel Prize in Physics 2018 was awarded 'for ground-breaking inventions in the field of laser physics' with one half to Arthur Ashkin 'for the optical tweezers and their application to biological systems' . . ."

Hence we have left the spelling unchanged.

- The reviewer's comment read: "It would be useful to the reader if a plot of a power spectrum of the particle position is included with the corner frequency indicated, so that it is transparent what the authors are referring to. This is after all the essence of their measurement."
Response: We thank the reviewer for the comment. A plot of the power spectrum (indicating the corner frequency) has been added as was suggested.

- The reviewer's comment read: "Last sentence in the results and discussion section: 'This could be attributed to internal processes of the cell . . .' This sentence is vague and not helpful. What internal processes that delay the motion in what way?"
Response: The reviewer's comment has been noted and the sentence has been revised to improve clarity. References have been included referring to the complex structure and viscosity of the cytoplasm. Please see the enclosed re-submission for the revision.
- The reviewer's comment read: "Last sentence of the conclusion: 'This work shows that regardless of unknowns, such as the exact value of the viscous drag of the cytosol for example, intracellular forces can be studied in live cells using the optical tweezers setup'. This is a rather unscientific statement. Surely, the viscous drag is known within some bounds, or the bounds can be estimated. That then leads to an uncertainty which propagates into a quantifiable uncertainty in the ultimate force measurement. Please revise."
Response: We take note of the reviewer's comments. The last sentence of the conclusion has been removed, since its essence is already discussed in the results and discussions section above.
- Furthermore, the syntax and grammar comments made by the reviewer were edited as indicated by their comments.

Thank you for the opportunity to revise the submission. We hope this meets the requirements and leads to the acceptance of this paper. Thank you for your consideration.

Kind regards,
Anneke Erasmus