Volume xx (200y), Number z, pp. 1–1

Peridynamics-Based Fracture Animation for Elastoplastic Solids

W. Chen, F. Zhu, J. Zhao, S. Li, G. Wang

1. Revision Summary

We have carefully revised our submission according to the suggestions of the associate editor. The major changes to the manuscript include (but not limited to):

1. Information about the damping models used in our experiments is included. In addition, we also add other two columns in Table 1 that specify all our damping parameters, which would be helpful to produce more reproductive results.
2. Detailed discussion for picking δ values is included and the new beam demo is added to our final video. Here, we emphasize that the simulation plausibility is not very sensitive to the parameter δ, and a value range from 1.0λ to 2.0λ is recommended. As for the seeming odd δ values $(1.34\lambda, 1.38\lambda)$, these values are fine-tuned just to achieve our best well-synchronized results with FEM. We additionally provide three more supplemental videos that use other values$(1.0\lambda, 1.2\lambda, 1.3\lambda)$, which show that the simulations are still physically plausible, but are less-synchronized with FEM compared to the fine-tuned results in our final video.
3. Discussion on pros and cons of our method compared with [PKA*05] is included.

Please refer to our revised paper.

References

[PKA*05] PAULY M., KEISER R., ADAMS B., DUTRÉ P., GROSS M., GUIBAS L. J.: Meshless animation of fracturing solids. *ACM Trans. Graph. 24*, 3 (July 2005), 957–964. 1