to: Geophysical Journal International

Dear Lapo and Authors:

The revised manuscript GJI-16-0524.R1 by Damien Pageot and coauthors entitled now as "Improving the seismic small-scale modeling by comparison with numerical methods" has been modified carefully to enhance the original submission. The authors addressed all points raised by me and another reviewer, improving the clarity and structuring of the paper. In this revision now, the authors clearly point out the new contributions and manage to present a nicely structured paper.

With this new revision, I would only recommend to slightly polish the text. Some small typos and writing mistakes made it into this revision which would be good to see corrected in a published version.

- page 3, line 74: "MUSC (Mesures Ultrasonores Sans Contact in French)" why not drop just the "in French", the abbreviation is MUSC not MUSCF...
- page 5, line 119: "in te" a typo, should be "in the"
- page 5, line 128: "the specificities"? more likely "the specifics"
- page 6, line 161: "piezzo-electric", you also use "piezoelectric" and "piezo-electric". Please only use one version (probably "piezoelectric") throughout the text.
- page 6, line 161: "For the linearized wave equation, ...", the paragraph becomes too long. Please consider splitting it up and separate the thoughts.
- page 10, line 287: "polynomial degree $n_l + 1 = 5$...", maybe better just state "polynomial degree $n_l = 4$ "
- page 14, line 443: "are closed", a typo, should be "are close"
- page 14, line 443: "and confirmed", a typo, should be "and confirm"
- page 15, line 473: "In the previous ...", again a very long paragraph. Please consider splitting it up and separate the topics.
- page 36, figure 10, caption: "cc gives ...", please specify if the cross-correlation values are for black—red or black—blue comparison
- there are some more sentences with some strange wording, please double-check again.

As a summary, I think this revised manuscript has been very well prepared and recommend to accept it for publication after minor modification to allow for polishing the text a bit further.

Sincerely,

Daniel Peter