

Magn. Reson. Discuss., author comment AC1
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Reply on RC1

Quentin Stern and Kirill Sheberstov

Author comment on "Simulation of NMR spectra at zero and ultralow fields from A to Z – a tribute to Prof. Konstantin L'vovich Ivanov" by Quentin Stern and Kirill Sheberstov, Magn. Reson. Discuss., <https://doi.org/10.5194/mr-2022-18-AC1>, 2022

The referee is right in saying that the content of our paper is “not so original”. It is in fact not original at all. Our aim in writing this paper was not to present original theory but rather to present known theory in a pedagogical way. We chose to focus on the simplest systems to make the paper easiest to follow for the newcomer. Yet, to make the paper more appealing to the expert, we will add a section showing the transition from ZULF to high-field for a CH₃ group.

We agree with the referee that highly valuable and pedagogical material can be found in PhD dissertations. One may therefore argue that papers that are only meant to be pedagogical are not useful. However, PhD dissertations are usually not as easily accessible. The starting Master student or PhD student who wants to discover the field will not come across a PhD dissertation easily by searching online. It's usually by word of mouth that people are advised to read PhD dissertations. That's why we believe that a paper presenting the basic concepts in detail is useful and can serve as an entry point to newcomers. That being said, we will add references to the PhD dissertations of T. Theis, J. Blanchard, and T. Slojander. Not only this will be useful for the reader but, as pointed out by the referee, it will be a due acknowledgment of the work done by these authors. We will also mention clearly that Butler et al's 2013 paper presents analytical solutions to similar cases (and more).

We would like to point out to the referee that we did not present numerical simulations only to understand the appearance of ZULF spectra. The primary aim was to show how to numerically simulate spectra. Again, whether such a paper is in itself useful is up for debate.

We thank the referee for the additional comments. We will take them into account in the next version of the paper (once we have received feedbacks from other referees)