

Magn. Reson. Discuss., author comment AC2
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Reply on RC1

Tom Barbara

Author comment on "The Lindbladian form and the reincarnation of Felix Bloch's generalized theory of relaxation" by Thomas M. Barbara, Magn. Reson. Discuss., <https://doi.org/10.5194/mr-2021-50-AC2>, 2021

I thank the reviewer for taking the time to read and comment on my submission. The typos in the reference to Bloch escaped my attention as well as some equation numbers and references to them that were mixed up. There are also incorrect statements regarding the use of the secular approximation and their relation to "bath symmetry" which I knew about but somehow did not change when I edited this for submission to Magnetic Resonance. Basically the bath symmetry argument is incorrect: it only takes care of one index. The edited version will take care of this, with correct equation numbering etc.

On the matter of clarity: In my experience every reader must dig to some extent, even if one knows the topic fairly well. Notation is never militarily enforced and some effort is required to go through it. I expect that if one did dig a little into section 2, they will find the ground soft and easy. Personally, I found Bengs and Levitt a not altogether "easy read", with unfamiliar notation in places that I had to sort out, especially to the manner in which they expressed spectral decomposition. Maybe that notation is standard now, but I had not seen it, and found it confusing, and had to work it out, as to what exactly they were doing.

Of course, I will be happy to consider specific recommendations on various points of confusion if they are offered. As the editors can appreciate, I do however desire to keep the paper short.