Reply on RC1
Dmitri V. Stass et al.

Author comment on "Simple rules for resolved level crossing spectra in magnetic field effects on reaction yields" by Dmitri V. Stass et al., Magn. Reson. Discuss., https://doi.org/10.5194/mr-2021-6-AC1, 2021

Thank you for a very interesting view at our work. Your interpretation of the behaviour of the spin system of a radical pair in the vicinity of level crossing points that we analysed as a sort of frequency shift similar to FM is really enlightening and triggers quite some further ideas and analogies. Especially valuable for us is the noted analogy to distinction between the zero-field and non-zero field crossings. It would be also interesting to ponder that what we have here is not only a spectrum shift, but also a pitch shift, or spectrum stretching, due to varying intersection angles of the crossing levels.. In radiotechnics pitch shifting is a time-domain rather than frequency-domain transform, realizable by picking samples faster/slower than they were originally taken, and it is really interesting to ponder what the implications of this might be for a spin system. The link to the field of radiofrequency techniques is indeed quite unexpected and potentially very fruitful as leading outside the box. Thank you very much for your input again. Regarding two your more specific notes, they are certainly valid and beneficial for the readers, and we shall incorporate suitable straightforward amendments for both of them to the revised version of this manuscript.