

Comment on mr-2022-8

Anonymous Referee #1

Referee comment on "The effect of spin polarization on double electron–electron resonance (DEER) spectroscopy" by Sarah R. Sweger et al., Magn. Reson. Discuss., <https://doi.org/10.5194/mr-2022-8-RC1>, 2022

I can only comment on the theory and simulation side of the manuscript. This is a beautiful work that can be published in the present form subject to the following minor fixes:

1. Right hand side is missing in Eq 13.
2. Brackets are mis-set in Eq S8.
3. Main text talks about modelling the 4-pulse DEER, but the SI then reverts to 3-pulse DEER - wording should be fixed.
4. The free electron g-factor approximation should be declared and explained.

I actually like Sections S1-S3 more than the main text. Relocate those to main text? MR is not some glossy magazine, the readership can handle an equation or two.