Reply to Comment on "Sensitivity of \((d, p)\) reactions to high \(n-p\) momenta and the consequences for nuclear spectroscopy studies"

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We point out that after presenting our results on high \(n-p\) momentum sensitivity of the \((d, p)\) cross sections in [1] the last paragraph of our Letter refers to a need of going beyond the leading order of Weinberg state treatment. This task could be achieved by using any method that can provide exact solution of the three-body problem. Deltuva uses Faddeev equations to study the NN-model dependence of the \((d, p)\) cross sections [2]. His results are consistent with a new study performed at Surrey which is undergoing a reviewing process at Physical Review C. Both studies discuss the \(n-p\) sensitivity within three-body \(n+p+A\) models with \(NN\)-independent \(N-A\) optical potentials. The sensitivity may reappear in many-body treatment of \((d, p)\) reactions, for example, due to the threshold position dependence.

[1] G.W. Bailey, N.K. Timofeyuk and J.A. Tostevin, Phys. Rev. Lett. 117 162502 (2016)
[2] A. Deltuva, [arXiv:1806.00298] (2018)