Progress in 3N Response Functions Using the LIT Technique

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Our earlier results\(^1\) for the longitudinal response functions of \(^3\)He and \(^3\)H began to display frame dependence at \(q=500\ \text{MeV/c}\). This is a manifestation of the non-relativistic framework of our calculations. We have found a method of extending such calculations to regions of higher \(q\) while drastically reducing the frame dependence. The method hinges on the choice of a particular frame and/or the details of the kinematical input. Results for the longitudinal response will be shown for \(q\) up to 700 MeV/c. In addition we will show our results to date for the transverse response functions of the trimucleons.