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3D Animations for Exploring Nucleon Structure¹ WAVERLY GOR-MAN, MATTHIAS BURKARDT, New Mexico State Univ — Over the last few years many intuitive pictures have been developed for the interpretation of electron hadron scattering experiments, such as a mechanism for transverse single-spin asymmetries in semi-inclusive deep-inelastic scattering experiments. While Dr. Burkardt's pictures have been helpful for many researchers in the field, they are still difficult to visualize for broader audiences since they rely mostly on 2-dimensional static images. In order to make more accessible for a broader audience what can be learned from Jefferson Lab experiments, we have started to work on developing 3-dimensional animations for these processes. The goal is to enable the viewer to repeatedly look at the same microscopic mechanism for a specific reaction, with the viewpoint of the observer changing. This should help an audience that is not so familiar with these reactions to better understand what can be learned from various experiments at Jefferson Lab aimed at exploring the nucleon structure.

¹Jefferson Lab Minority/Female Undergraduate Research Assistantship

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