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Recent HERMES Results in Exclusive ρ and ϕ **Transverse Target Spin Asymmetries**¹ STEPHEN GLISKE, WOLFGANG LORENZON, University of Michigan, HERMES COLLABORATION — Recent results from HERMES on transversely polarized hydrogen include exclusive π^+ Transverse Target Spin Asymmetries (TTSAs), as well as two moments of the L/T separated TTSA for exclusive ϕ production. Fourier components of TTSAs provide access to mostly unknown Generalized Parton Distributions (GPDs), which extend our description of the nucleon structure beyond the standard parton distributions. GPDs also allow a model-dependent extraction of the orbital angular moment of quarks in the nucleon. Both the π^+ and ϕ results will be presented, along with recent NLO GPD model predictions. In addition, a new unbinned method for unfolding acceptance and smearing effects will be discussed that provides increased capabilities for future measurements, e.g. p_T -weighted TTSA moments and increased precision.

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