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Application of Generative Adverserial Networks to electron-proton scattering¹ PAWEL AMBROZEWICZ, Jefferson Lab, YASIR ALANAZI, Old Dominion University, MICHELLE KUCHERA, Davidson College, YAOHANG LI, Old Dominion University, TIANBO LIU, EVAN MCCLELLAN, WALLY MELNITCHOUK, Jefferson Lab, ERIC PRITCHARD, RAGHU RAMANUJAN, MICHAEL ROBERTSON, Davidson College, NOBUO SATO, Jefferson Lab, RICHARD STRAUSSE, Davidson College, LUISA VELASCO, University Of Dallas — Generative Adverserial Networks (GANs) are used to faithfully generate final state particle phase space in electron-proton scattering. Using GANs allows to build a Monte Carlo event generator free of theoretical assumptions. The architecture of the employed GAN will be discussed and generation results will be presented.

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