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The 3-D structure of pions[1] LEONARD GAMBERG, Pennsylvania State University, PATRICK BARRY, North Carolina State University , WALLY MELNITCHOUK, NOBUO SATO, Thomas Jefferson National Lab — We present a study of the transverse momentum dependent distribution of the pion (pion TMD) from pion-induced Drell-Yan (DY) scattering. We describe the DY cross section over the entire range of transverse momentum for moderate Q kinematics, using the state-of-the-art Collins Soper Sterman (CSS) transverse momentum dependent factorization formalism. Using the JLAB Angular Momentum Collaboration (JAM) machinery we extract the pion TMD using Bayesian inference. This setup will allow us to perform a simultaneous self-consistent determination of pion and nucleon TMDs from hard processes and map out the 3-D structure of pions.

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