## $A_N$ at RHIC: What have we learned?

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July 1, 2016

Measurements of single single spin asymmetries  $(A_N)$  in spin-polarized protonproton collisions are a relatively straightforward experimental measurement that offers insight into the structure of the proton. However,  $A_N$  integrates over both initial and final-state effects, making the interpration of a single measurement in terms of the underlying physical processes difficult. The RHIC experiments have provided a wealth of  $A_N$  measurements for more than a decade, with exciting new measurements on the horizon. In this talk I will review the history of single-spin asymmetry measurements from the RHIC experiments and highlight how they have challenged our understanding of fundamental QCD and driven theoretical development. Future measurements in RHIC Run-17, as well as the propect of expanded measurements with improved forward instrumentation offer the promise a continued window into the unsolved problem of proton structure.