

The First Measurement of the Elastic pp-scattering Spin Parameters at $\sqrt{s} = 200$ GeV

I.G. Alekseev^{5†}, A.A. Bogdanov⁴, S. Bültmann¹, I.H. Chiang¹, B. Chrien¹,
J. Chwastowski², K. De⁷, A. Drees¹, R. Gill¹, N. Guler⁷, W. Guryn^{1*},
M. Haguenauer³, V.P. Kanavets⁵, A. Khodinov⁶, L.I. Koroleva⁵, J. Li⁷,
J. Landgraf¹, T.A. Ljubičić¹, D. Lynn¹, B.V. Morozov⁵, S.B. Nurushev⁴,
N. Öztürk⁷, B. Pavlik², C. Pearson¹, P. Pile¹, M. Rijssenbeek⁶,
M.F. Runtzo⁴, A. Rusek¹, M. Sakitt¹, A. Sandacz⁸, M.N. Strikhanov⁴,
D.N. Svirida⁵, S. Tepikian¹, I. Whithead⁶, S. Yeung⁶, K. Yip¹,

(1) *Brookhaven National Laboratory, Upton, NY 11973, USA*

(2) *Institute of Nuclear Physics, Radzikowskiego 152, Cracow, PL-31-342, Poland*

(3) *Ecole Polytechnique, F-91128 Palaiseau CEDEX, France*

(4) *Moscow Engineering Physics Institute, Kashirskoe sh. 31, Moscow, 115409,
Russia*

(5) *Institute for Theoretical and Experimental Physics, B. Cheremushkinskaya
25, Moscow, 117218, Russia*

(6) *Stony Brook University, Stony Brook, NY 11794, USA*

(7) *University of Texas at Arlington, Arlington, TX 76019, USA*

(8) *Institute for Nuclear Studies, Hosa 69, Warsaw, PL-00-681, Poland
* Spokesperson*

† *E-mail: Igor.Alekseev@itep.ru*

Keyword : polarized protons, elastic scattering,
Coulomb nuclear interference.

Elastic scattering of polarized protons in the range of very small momentum transferred was studied for the first time at $\sqrt{s} = 200$ GeV in the experiment pp2pp at RHIC. Single spin asymmetry A_N and double spin asymmetries A_{NN} and A_{SS} measured in this experiment will be presented.