RHIC to AGS Transfer Line: Design and Commissioning*, L. AHRENS, M. BRENNAN, K. BROWN, T. CLIFFORD, R. CONNOLLY, F. DELL, D.P. DENG, L. HOFF, J. KEWISCH, W.W. MACKAY, G. MALDONADO, B. MARTIN, R. OLSEN, S. PEGGS, F. PILAT, T. ROBINSON, S. SATHE, T. SATOGATA, D. SHEA, M. TANAKA, P. THOMPSON, S. TEPIKIAN, G. TRAHERN, D. TRBOJEVIC, T. SHEA, N. TSOUPAS, J. WEI, R. WITKOVER, P. ZHOU, BNL - In the fall of 1995, we successfully completed a major milestone in the RHIC project: the first beam test of the AGS to RHIC (ATR) transfer line. The ATR serves as a testbed for the new RHIC control system. This transfer line is highly instrumented, with several types instrumentation for characterizing the extracted beam from the AGS and for matching the beam into RHIC. We describe the design and performance of the ATR with gold ions with an eye to reaching the design criteria for RHIC operation, both in beam quality and controls.

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