

Abstract Submitted
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A Straw-Tube Tracking System

J.C. ARMITAGE, P.C. CHEVREAU, C. LU, K.T. McDONALD,
and M.E. WALL, *Princeton University* — We have examined
several issues towards the construction of a large straw-tube
tracking system for an SSC detector that emphasizes precision
position resolution. For individual straws-tube detectors we have
studied the pressure and temperature dependence of the gas gain,
drift velocity, and spatial resolution, and we have also character-
ized the electrostatic instability of the anode wire. Towards the
assembly of large systems we have explored the choice of cathode
substrate and metallization, and developed techniques for con-
struction of superlayers and the associated end plugs. Tests of
front-end electronics have been made in conjunction with U. Penn.

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