

Production of Bakelite RPC Gas Gaps for the PHENIX Muon Trigger Upgrade

Tuesday, 9 February 2010 17:40 (20 minutes)

The muon trigger upgrade of PHENIX includes the construction and installation of resistive plate chambers (RPCs) in the forward muon spectrometers and to upgrade the frontend electronics of the existing muon tracking chambers.

About 300 gas gaps were produced, passed strict quality assurance procedures and are presently being assembled into RPC-1 and RPC-3 stations. Recently, the installation of station RPC-3 in the north muon arm has been completed.

Results from the strict quality assurance procedures for the RPC with linseed oil treatment will be presented.

Together with the quality assurance data, we also present

a procedure to ensure the quality of the gas gaps.

Finally, the characteristics of the PHENIX RPCs in avalanche operation mode

will be compared with those of the double gap muon trigger RPCs developed for the CMS forward region.

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Session Classification: R & D in wide-gap RPCs