

Preliminary results on optimization of gas flow rate for ICAL RPCs

M.Bhuyan¹, S.D.Kalmani¹, N.K.Mondal¹, D.Samuel¹, B.Satyanarayana¹

1: Department of High Energy Physics, Tata Institute of Fundamental Research, Mumbai, 400005, India.

Email: manas@tifr.res.in

Resistive Plate Chambers (RPCs) are always operated with the gas mixture flowing through its detecting volume continuously. We studied the long term performance of the RPCs in gas sealed condition. We found that the operating parameters of RPCs changed by less than 5 % during a three month long study. The sealed gas after the study was found to contain air and water vapour as main contaminants, which is likely due to leaks in gas circuits. Preliminary results of these studies will be presented.