SETUP
High-rate tests of CBM-MUCH RPC and readout system

MEASUREMENT
In this test at the GIF , The rate capability of bakelite based PC will be tested which will be used as 3rd and 4th station in MUCH in CBM experiment. A 30 cm x 30 cm prototype will be tested in the GIF high-rate environment corresponding to the intended interaction rates at the SIS100 accelerator. We are applying for a GAMMA and MUON BEAM test period in October 2018 along with CBM-TRD in order to determine the combined muon detection efficiency of RPC under high rate environment. We are applying for a position near to CBM-TRD position and is seen as crucial to approve the system for CBM MUCH configuration.

BEAM REQUEST
Source + beam
1 period of 1 week
(after 1 week of installation and gas flushing time)
During 24-30th October, 2018

Details of the detector (RPC)

Detector Box dimension: 44 cm X 44 cm X 8 cm
Detector Material: bakelite based gas gap.
Box material: Perspex
Gas to be used:

R134a : iC_4H_{10} : SF6
Ratio (1) : 93.5 : 4.7 : 1.8
(2) 95:4.5:0.5 (If 2nd mixing ratio available)