Minutes of WP-meeting 468

Attendance:
Zoom: Paul Colas, Ritsuya Hosokawa, Jochen Kaminski, Shinya Narita, Jan Timmermans, Kanako Watanabe,

General News:
The list of upcoming workshops etc. is:
International Workshop on the High-Energy Circular Electron-Positron Collider (CEPC2026) (https://indico.ihep.ac.cn/event/28911/) 21.-26.10.2026
DRD1 Materials Workshop (https://indico.cern.ch/event/1736780/) 30.10.2026 9:45-12:45
FCC-ee France
FCC-ee Tracking and PID Workshop (https://indico.cern.ch/event/1660971/) 16.-20.11.2026 at CERN
FCCee-Germany 3./4. 12. 2026 at DESY, Hamburg
DRD1 7.-11.12.2026 (https://indico.cern.ch/event/1733613/)

News from the groups:
Kanako reported from the ongoing IBF measurements at CERN. She showed pictures of the detector and the setup such as the GEM stack with amplification GEMs and gating GEM. Sofar, she has assembled the detector and tested the HV-power supply, as well as the detector with HV. Currently, the detector is flushed with Ar:CO_2 70:30, but a premixed bottle of T2K gas will arrive today or tomorrow. This gas will be used for then on. A first scan of high voltages was done in Ar:CO2. The GEMs were scanned from 260V to 320 V and the drift/transfer/induction fields between 400-700V. GEM1 showed problems of sparking and, therefore, an alternative setup with a double GEM instead of a triple GEM was tested. Here, the GEMs could be operated at voltages of 350V-360V.
To reach a higher current, not only the ^{55}Fe source with an activity of 40 MBq was tested, but also an X-ray gun, which can go up to rates equivalent to a 600 MBq source. For high gas gains (U = 320 V) an apparent drop in rates was observed, which is likely because the photoline of the spectrum moves outside of the operation range of the preamplifier. This happens for both the radioactive source and the X-ray gun.
Currents were measured only at the anode with the Keithley, as the picologic, which should be used at the cathode side, but could not be communicated with yet.
Ralf found a 10x10cm² gating GEM, which will be sent to CERN as a backup or confirmation sample. This gating GEM was rather new production.
In total Kanako is almost ready to start the measurements.
The question was raised, how much a magnetic field would change the results.

AOB:
The next workpackage meeting will take place on November 5th.