

Figure 1: Calibrated low-gain ADC response of the FEB to an injected signal for typical low-gain settings. Magenta points indicate the points where the linearity of the FEB response is lost for each setting of the gain considered in the study. Negligible difference is observed among channels of the same FEB. Gain value is in terms of the slow control DAC gain value.



RMS vs Amplitude (all channels average) in the linearity regime

Figure 2: Calibrated and channel-averaged signal-to-noise ratio of the dgitized FEB response to an injected signal for various amplitudes of the input and typical high-gain settings. Error bars represent RMS of channel-to-channel fluctuations.



Figure 3: Observed cross-talk between channels. Cross-talk is measured as relative to a known injected signal of 1200 photoelectrons.



Figure 4: Setup for the FEB Hardware Quality Check.



Figure 5: RMS of the HV measurement on the 8 MPPC bias voltage sensors present on the FEB, as a result of the first Quality Check and sensor calibration campaign. The horizontal line shows the acceptance limit. The FEBs with RMS above limit were repaired and re-evaluated before installation in the detector.