gkm, 19 October, 1998

Minutes of the

11th Meeting of the COMPASS Technical Board

October, 7, 1998

LeCroy HV systems (D. Antreasyan)
D. Antreasyan from LeCroy presented the new LeCroy HV systems, mainframes 145x. In particular the models 1461 ("PMs") and 1469 ("Chambers") were discussed. He also presented preliminary excerpts from a positive evaluation by the CERN Electronics Pool. The new series is much more powerful then the previous one, 144x. However, also more expensive.

Options for the RICH HV systems (S. Dalla Torre)
Silvia presented a comparison of CAEN A821 (SY527) and LeCroy 1471P/M010 (1458) for the RICH application. Both systems are comparable in specifications and price. After a lengthy discussion the purchase of CAEN HV supplies was recommended for all remaining COMPASS applications. This reflects the fact that most institutes have already some of these modules.

The Chorus calorimeter (A. Bressan)
Andrea introduced an offer by the Chorus collaboration (Naples group) to use their compensated Spaghetti calorimeter in COMPASS. The resolution of this device is excellent ($30\%/\sqrt{E/GeV}$) and $14\%/\sqrt{E/GeV}$ for hadron/electromagnetic). However, due to its construction using bars perpendicular to the beam, its seems not well suited for COMPASS. The cluster finding for the muon trigger would be impossible and the high rate would lead to confusion of hits. Also the radiation hardness is questionable. It was therefore decided not to accept the offer.

VME 9u requirements (I. Konorov)
Igor presented the requirements for VME 9u crates as discussed in the meetings of the Frontend Group. The specifications will be available from the COMPASS webpages.

Discussion on the SM1/RICH1 region and cooling
Finally, the region between SM1 and RICH1 was discussed. It was decided to grant 1 m space along the beam for the three straw stations. This is an increase by 0.10 m. In case the straw chamber frames are produced from aluminum as presently foreseen a temperature stabilisation is inevitable to cope with thermal expansion. In case the chambers are included in the RICH1 tent, cooling of the frontends must be foreseen. The power consumption of the straw frontends amounts to 2.2 kW, while the MSGCs (GEMs) contribute only around 20 W. Presently no cooling of the frontends is foreseen in the design! The discussion will be resumed in the next meeting and in a meeting with M. Bosteels.