Run IB run is scheduled to end in February 1996, with a total of $\sim$ 150 pb^{-1} delivered to each interaction region.

5 The DØ and CDF Experiments

The DØ and CDF detectors have been designed to trigger and record the high P_T collisions that result when two partons in the $\overline{p}p$ system undergo a hard scatter. Both instruments detect electrons, muons, neutrinos and quark and gluon jets using a set of complementary subdetectors. However, they accomplish this common goal in rather different ways.

5.1 The DØ Detector

The DØ detector was designed with the philosophy that a uniform, hermetic, highly-segmented calorimeter should form the core of the detector [16]. A cut-away view of the detector is shown in Fig. 2. The DØ calorimeter employs a Uranium absorber up to nine interaction lengths thick and a liquid Argon readout system. This provides excellent hermeticity and uniformity, except perhaps in the transition region between the barrel and endcap cryostats. The overall resolution of the DØ calorimeter is

$$\frac{\sigma_E}{E} = \frac{0.15}{\sqrt{E}} \oplus 0.004 \text{ for electromagnetic showers} \quad (5)$$

$$\frac{\sigma_E}{E} = \frac{0.80}{\sqrt{E}} \text{ for hadrons.} \quad (6)$$

A muon system consisting of charged particle detectors and 1.9 Tesla toroidal magnets located outside the calorimeter provides good muon identification. The DØ detector identifies muon candidates in the region $|\eta| < 3.3$ using a set of muon tracking chambers consisting of proportional drift tubes outside the calorimeter. The chambers are located interior and exterior to the large toroidal magnetic field. The deflection of the muon candidates in the magnetic field provides a momentum measurement with an accuracy of

$$\sigma\left(\frac{1}{p}\right) = \frac{0.18\,(p-2)}{p^2} \oplus 0.008, \quad (7)$$

where p is the muon momentum measured in GeV/c.

A vertex, central and forward drift chambers provide charged particle detection in the interval $|\eta| < 3.2$. The tracking system does not incorporate a magnetic field, as the presence of a magnetic coil would degrade calorimeter performance.

5.2 The CDF Detector

The CDF detector [17] consists of a high-precision tracking system in a 1.4 T solenoid magnetic field, surrounded by a hermetic highly-segemented calorimeter, as