Figure 1: Diagrams (a) s-channel resonant production and (b) u-channel exchange of a leptoquark with fermion number $F = 2$. Diagrams involving a $F = 0$ leptoquark are obtained from (a) and (b) by exchanging q and $\bar{q}$.

Figure 2: Kinematics in the $y_e - M_e$ plane of the selected NC DIS candidates. Three isocurves at $Q^2 = 2500, 15000$ and 30000 GeV^2 are also shown as full lines.

Figure 3: Distributions of (a) the transverse energy and (b) the polar angle of the electron; (c) the missing transverse momentum and (d) the transverse momentum of the highest P_T jet for the selected NC DIS candidates. Symbols correspond to data events and histograms to SM simulation.

Figure 4: Q_e^2 distribution of the selected NC DIS candidate events for the data (• symbols) and for standard NC DIS expectation (histogram); (b) ratio of the observed and expected (from NC DIS) number of events as a function of Q_e^2; the lines above and below unity specify the $\pm 1\sigma$ levels determined using the combination of statistical and systematic errors of the DIS expectation.

Figure 5a,b: Mass spectra for NC DIS-like final states for data (symbols) and DIS expectation (histograms). The NC DIS-like comparison is shown before (open triangles, white histogram) and after (closed dots, hatched histogram) a y cut designed to maximize the significance of an eventual (a) scalar and (b) vector LQ signal. The greyed boxes indicate the $\pm 1\sigma$ band combining the statistical and systematic errors of the NC DIS expectation.

Figure 6: Exclusion limits at 95% CL on the Yukawa coupling λ as a function of the LQ mass for (a) scalar and (b) vector LQs with fermion number $F = 2$ described by the BRW model. Domains above the curves are excluded. The upper curve on each plot indicates the limit obtained from the (less suited for $F = 2$ LQs) e^+p data.

Figure 7a,b: Mass dependent exclusion limits at 95% CL on the branching ratio β_e of the LQ to decay into eq for scalar LQs with $F = 2$ produced by (a) e^-d and (b) e^-u fusion. The $D\emptyset$ limit is also shown as hatched region.

Figure 8: Mass spectra for CC DIS-like final states for data (symbols) and SM expectation (histograms). The greyed boxes indicate the $\pm 1\sigma$ band combining

the statistical and systematic errors of the SM expectation.

Figure 9: Domains ruled out by the combination of the NC and CC analyses, for a scalar LQ coupling to $e^- u$ and decaying only into $e + q$ and $\nu + q$ for three example values of the Yukawa coupling. The regions on the left of the full curves are excluded at 95% CL. For $\lambda = 0.05$, the part of the plane $BR(LQ \rightarrow eq)$-M_{LQ} ($BR(LQ \rightarrow \nu q)$-M_{LQ}) on the left of the dashed (dotted) curve is excluded by the NC (CC) analysis. The branching ratios $BR(LQ \rightarrow eq)$ and $BR(LQ \rightarrow \nu q)$ are shown on the left and right axes respectively. The domain excluded by the $D0$ experiment is also shown as the greyed region. This figure complements / updates Fig. 7b of the contributed paper #954 submitted to the ICHEP'2000 conference.