

## ABSTRACT

We propose to extend the existing measurements of the tensor polarization of the deuteron produced in the  $D(e, e' d)$  elastic scattering. Using the CEBAF facility and a new deuteron tensor polarimeter (*POLDER*), the  $t_{20}$  of the recoiling deuteron will be measured in the range of momentum transfer  $Q = 4.4 - 6.2 \text{ fm}^{-1}$ . When combined with the knowledge of the structure functions  $A$  and  $B$ , this quantity permits the separation of the charge ( $G_C$ ) and quadrupole ( $G_Q$ ) form factors of the deuteron. The determination of  $G_C$  at large momentum transfer will test the applicability of existing theoretical models and their assumptions, and determine the effects of non-nucleonic degrees of freedom.

---

April 2, 1993