

Quasi-Elastic Electron-Deuteron Scattering and Calculation of Neutron Electromagnetic Form Factors at  $Q^2=1.75$  to  $4.00$  (GeV/c)<sup>2</sup>

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Abstract: Electric and Magnetic form factors of neutron are calculated via electron-deuteron scattering at  $1.511\sim 5.507$  GeV energy using SLAC group data. Our results show that the neutron electric form factor is not equal to zero; rather it has a small value, indicating that in spite of the fact that total charge is almost neutral, there is a nonuniform charge distribution within the neutron, and that magnetic form factor follows the dipole fit.

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Key words: electric form factor, magnetic form factor, neutron charge distribution, dipole fit

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