

Abstract for an Invited Paper  
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**Journey to the Center of the Neutron<sup>1</sup>**

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The meaning of model-independent transverse charge densities derived from measured electromagnetic form factors is discussed. The use of experimental data for the neutron electromagnetic form factors led to the finding that the central density of the neutron is negative, in contrast with the expectations of many that it is positive. An explanation for this is presented by using data for deep inelastic scattering to interpret the elastic form factor data via the Drell-Yan-West relation. Current experimental data indicate that the negatively charged  $d$  quark dominates the neutron structure function at large values of Bjorken  $x$ , where the large longitudinal momentum of the struck quark determines center-of-momentum of the system, and thus the center of the neutron. Thus the center of the neutron is occupied mainly by  $d$  quarks.

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