



Karl Herzfeld Memorial Lecture

Department of Physics

THE CATHOLIC UNIVERSITY OF AMERICA

What Do Protons and Neutrons Look Like?

presented by:

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Protons and neutrons (known collectively as nucleons) are the building blocks of nuclei. We know that they are not fundamental particles, but are composite systems of finite size, built up of quarks interacting by the exchange of gluons. Nevertheless, after decades of quark physics, many of the fundamental properties of nucleons, including their size and shape, are still not well understood. The distribution of charge and magnetization inside protons and neutrons can be studied via the scattering of energetic electrons. Recent advances in accelerator and detector technology have made it possible to get a complete set of measurements for the shapes of protons and neutrons. The talk will cover the experimental techniques, the results of the measurements, and the interpretation of the data.

Friday, March 24, 2006

in the Karl Herzfeld Auditorium of Hannan Hall – Room 108

4:00 p.m.

Reception immediately following lecture
Telephone: (202) 319-5315

