Abstract Submitted
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Design of a Noble Gas Cerenkov for the Super High Momentum Spectrometer for 12 GeV at Jefferson Lab DONAL DAY, MIKHAIL YUROV, University of Virginia — The 12 GeV upgrade of the accelerator and the associated experimental facilities at Jefferson Lab will provide innumerable new opportunities for nuclear science. In Hall C the new Super High Momentum Spectrometer (SHMS) will provide excellent angular and momentum resolution up to a maximum central momentum of 11 GeV/c and a diverse set of directed studies, from the spin structure of the neutron to multi-nucleon correlations in nuclei, are planned. These and other approved experiments demand robust particle identification. As part of the electron identification and pion rejection package, a 2 meter long, 4-mirror noble gas Cerenkov counter is being built. The design principles, expected performance and status of the project will be presented.

Donal Day
University of Virginia

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