

Abstract Submitted
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Role of Short Range Correlations in the Neutron Skin¹ GERALD

A. MILLER, University of Washington — Recent experiments and many-body calculations indicate that approximately 20% of the nucleons in medium and heavy nuclei $A \geq 12$ are part of short-range correlated (SRC) primarily neutron-proton . Previous work found that using chiral dynamics to account for the formation of np pairs due to the effects of iterated and irreducible two-pion exchange leads to values consistent with the 20% level. Here chiral dynamics is applied to study how these correlations influence the calculations of neutron radii of nuclei.

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