Charge radii of neutron-deficient Ca isotopes[1] A. J. MILLER, K. MI-
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R. PEARSON, TRIUMF — Nucleon shell closures are generally associated with a
local minimum in mean-square charge radii, $\langle r^2 \rangle$, along an isotopic chain. The $\langle r^2 \rangle$
of $_{18}$Ar and $_{19}$K isotopes, however, do not show this signature at the $N = 20$ neutron
shell closure. To gain a microscopic understanding of this abnormal behavior, mea-
surements of $\langle r^2 \rangle$ of neutron-deficient Ca isotopes below $N = 20$ have been proposed
at the BEam COoling and LAser spectroscopy (BECOLA) facility at NSCL/MSU.
Preliminary results will be presented and the deduced charge radii will be compared
to theoretical calculations and the trends in the nearby isotopic chains.

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