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Electromagnetic structure of charmed baryons in Lattice QCD

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The electromagnetic form factors of \Sigma_c, \Xi_cc, \Omega_c and \Omega_cc baryons are computed and their electric and magnetic charge radii as well as their magnetic moments are extracted in 2+1 flavor Lattice QCD. Extrapolated physical point results show that the charge radii and magnetic moments are smaller compared to those of, e.g., proton. Investigating the individual quark contributions suggests that the existence of the heavy charm quark is responsible of such decrease.

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