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**Charge ordering in electron-doped infinite-layer cuprate $\mathbf{Sr_{1-x}La_xCuO_2}$** HAOFEI WEI, Cornell University, CHIARA SACCO, ALICE GALDI, Universita di Salerno, CHRISTOPHER MCMAHON, University of Waterloo, JACOB RUF, Cornell University, CISSY SUEN, McMaster University, RONNY SUTARO, FEIZHOU HE, Canadian Light Source, LUIGI MARITATO, Universita di Salerno, DARRELL SCHLOM, Cornell University, DAVID HAWTHORN, University of Waterloo, KYLE SHEN, Cornell University — Charge ordering has emerged as a likely candidate for a universal ordering parameter in both hole- and electron-doped cuprates. In the electron-doped cuprates, however, charge order has only been detected in the $R_{2-x}Ce_xCuO_4$ (R=La,Nd) family. With its simple structure lacking both structural distortions and magnetic ions, the infinite-layer cuprate $Sr_{1-x}La_xCuO_2$ represents an important model system for studying charge ordering in electron-doped cuprates. Here, we use resonant elastic x-ray scattering to study charge ordering in $Sr_{1-x}La_xCuO_2$. Using a quantitative model to account for the fluorescent background, we detect signatures of charge order in several samples with doping near x=0.07. We find the ordering wavevector of the charge order to be Q=(0.13±0.02, 0, L), significantly smaller than has been observed in other cuprates. We discuss the relationship between the charge order and the Fermi surface in this material.

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