## Abstract Submitted for the MAR05 Meeting of The American Physical Society

Search for uniform periodicity around the chemical window in manganites NEIL MATHUR, SUSAN COX, University of Cambridge, TONY WILLIAMS, PAUL ATTFIELD, University of Edinburgh, PAUL MIDGLEY, University of Cambridge — We have recently shown that the low temperature superstructure in  $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$  ( $x \ge 0.5$ ) possesses a uniform modulation that is not consistent with the charge-ordered stripe picture [cond-mat/0308581]. Here we investigate whether this phenomenon is confined to (La,Ca)MnO<sub>3</sub> or whether it arises in other manganites where the tendency to charge localisation is stronger.

<sup>1</sup>This work was funded by the UK EPSRC and the Royal Society

Neil Mathur University of Cambridge

Date submitted: 01 Dec 2004 Electronic form version 1.4