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**Induced Ti magnetism at titanate / manganite interfaces** J. GARCIA-BARRIOCANAL, F.Y. BRUNO, A. RIVERA-CALZADA, C. LEON, J. SANTAMARIA, GFMC. Dpto. Física Aplicada III, Universidad Complutense de Madrid, 28040 Madrid, Spain, J.C. CEZAR, P. THAKUR, N.B. BROOKES, European Synchrotron Radiation Facility (ESRF), 6 rue Jules Horowitz, B.P. 220, F-38043 Grenoble Cedex, France, J.W. TAYLOR, J.A. DUFFY, S.B. DUGDALE, C. UTFELD, S.R. GIBLIN, ISIS Facility, Rutherford Appleton Laboratory, Chilton, Oxfordshire, OX11 0QX, United Kingdom., T. NAKAMURA, K. KODAMA, Japan Synchrotron Radiation Research Institute, SPring-8, 1-1-1 Kouto, Sayo, Hyogo 679-5198, Japan, S. OKAMOTO, Materials Science and Technology Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37831-6071, USA — We show evidence of induced magnetism resulting from the electronic (charge) or orbital reconstruction occurring at the interface. We show a novel form of Ti magnetism at the interface between $SrTiO_3$ (STO) and $LaMnO_3$ (LMO) [1] as evidenced by evidenced by a strong XMCD signals at Ti and Mn edges. The magnetic alignment (ferromagnetic or antiferromagnetic) of Ti and Mn moments can be tuned by structural parameters.

[1] J. Garcia-Barriocanal et al. Nature Comm. **1**:82 doi: 10.1038/ncomms1080 (2010)

J. Santamaria
GFMC. Dpto. Física Aplicada III, Universidad Complutense
de Madrid, 28040 Madrid, Spain

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