

## **Polarons in real and reciprocal space**

**G. Aeppli, C. Renner, H. Ronnow, T.G. Perring,  
T. Kimura and Y. Tokura**

*London Centre for Nanotechnology(UK), Paul Scherrer  
Institute (CH), Rutherford-Appleton Laboratory(UK), Bell  
Laboratories (USA) and University of Tokyo(Jp)*

**Keywords: scan probe microscopy, manganites, tunneling,  
neutron scattering, confinement, optical conductivity,  
bilayers**

We describe dc and optical conductivity, neutron scattering and scan probe microscopy measurements which provide images of the spin and lattice textures associated with the charge carriers in single crystal samples of the bilayer manganites,  $\text{La}_{2-2x}\text{Sr}_{1+2x}\text{Mn}_2\text{O}_7$

Ref.

H. Ronnow et al. Nature 440, 1025-1028 (2006)