Abstract Submitted
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Magnetic susceptibility of $La_{0.7}Ca_{0.3}MnO_3$ at very low magnetic fields in the vicinity of the ferromagnetic transition[1] JOHN J. NEUMEIER, JOSE A. SOUZA, Montana State University, YI-KUO YU — Magnetic susceptibility (χ) measured at magnetic fields H as low as 0.2 Oe is reported for $La_{0.7}Ca_{0.3}MnO_3$. A pronounced enhancement in χ is observed in the region above the critical temperature T_c at very low H. As the magnetic field is increased, this feature is shifted toward T_c, eventually vanishing near $H = 400$ Oe. Electrical resistivity measurements show a positive magnetoresistance effect between 0 and 500 Oe in a temperature range slightly above T_c. The results are discussed in a scenario of frustrated magnetism and the possibility of a Griffiths singularity is addressed.[1]
[1] Chan, Goldenfield, and Salamon, Phys. Rev. Lett. 97 (2006) 137201.

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