

Abstract Submitted
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What is going on in liquid metals?¹ MARK PATTY, KEARY SCHOEN, WOUTER MONTFROOIJ, Department of Physics and Missouri Research Reactor, University of Missouri, ZAHRA YAMANI, Canadian Neutron Beam Center, Chalk River Laboratories — We present neutron scattering data on a range of liquid metals that demonstrate that there is a contribution to the total scattering of a neutron by a metal that is in excess of the coherent and incoherent cross-sections. We show by means of polarized neutron scattering data on liquid Gallium that this additional contribution is not magnetic in origin, ruling out a possible explanation that appeared to fit all the facts [Patty et al., Phys. Rev. E 73, 021202 (2006)].

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