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Abstract

A neutron diffraction study on the powdered sample of FeSn has been made in order to determine the magnetic structure of this compound. The magnetic unit cell is twice as large as the chemical cell, being doubled along the c -axis. The moments of iron atoms are ferromagnetically coupled within a c -plane, while they are coupled antiferromagnetically to those on the adjacent c -planes. The moments lie in the c -plane. The atomic magnetic moment of Fe is obtained to be $1.5_8 \pm 0.1 \mu_B$ at liquid nitrogen temperature.

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